

VOLUME XXXIX

NUMBER FOUR

THE NATIONAL GEOGRAPHIC MAGAZINE

APRIL, 1921

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SIXTEEN PAGES OF ILLUSTRATIONS
IN FULL COLOR

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63 Illustrations

HAROLD F. WESTON

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TO CARRY out the purpose for which it was founded thirty-three years ago, the National Geographic Society publishes this Magazine. All receipts from the publication are invested in the Magazine itself or expended directly to promote geographic knowledge and the study of geography. Articles or photographs from members of the Society, or other friends, are desired. For material that the Magazine can use, generous remuneration is made. Contributions should be accompanied by an addressed return envelop and postage, and be addressed: Editor, National Geographic Magazine, 16th and M Streets, Washington, D. C.

Important contributions to geographic science are constantly being made through expeditions financed by funds set aside from the Society's income. For example, immediately after the terrific eruption of the world's largest crater, Mt. Katmai, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. So important was the completion of this work considered that four expeditions have followed and the extraordinary scientific data resultant given to the world. In this vicinity an eighth wonder of the world was dis-

covered and explored—"The Valley of Ten Thousand Smokes," a vast area of steaming, spouting fissures, evidently formed by nature as a huge safety-valve for erupting Katmai. By proclamation of the President of the United States, this area has been created a National Monument. The Society organized and supported a large party, which made a three-year study of Alaskan glacial fields, the most remarkable in existence. At an expense of over \$50,000 it has sent a notable series of expeditions into Peru to investigate the traces of the Inca race. The discoveries of these expeditions form a large share of the world's knowledge of a civilization which was waning when Pizarro first set foot in Peru. Trained geologists were sent to Mt. Pelée, La Soufrière, and Messina following the eruptions and earthquakes. The Society also had the honor of subscribing a substantial sum to the historic expedition of Admiral Peary, who discovered the North Pole April 6, 1909. Not long ago the Society granted \$20,000 to the Federal Government when the congressional appropriation for the purchase was insufficient, and the finest of the giant sequoia trees of California were thereby saved for the American people and incorporated into a National Park.

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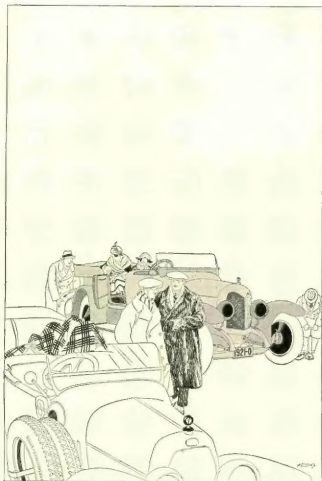
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MAIL INQUIRIES GIVEN PROMPT ATTENTION

FIFTH AVENUE & 37TH STREET
NEW YORK



\$250.00 Prize Contest

This picture is an advertising illustration. It is similar to the pictures that have been used in like advertisements during the past year. Do you know what well-known product it advertises? If you do, you may win \$250.00.

Read the conditions below

TO COMPLETE this advertisement we need a dialogue or monologue of not over 35 words which will represent the conversation of the characters in the picture and will bring out some desirable feature of the product advertised.

What are the people in this picture saying? For the most apt and most cleverly worded dialogue or monologue that completes this advertisement and that is submitted to us by May 15, 1921, we will pay \$250.

Any one may enter this contest except professional advertising writers. Should the winning advertisement be submitted in identical wording by more than one person, each will be paid \$250. The prize-winning answer, together with the name and address of the winner, will appear in the October issue of this magazine. However, a check will be mailed to the winner as soon as the contest can be decided.

Contest Editor, 16th Floor, 150 Madison Ave., New York



The Chandler Still Leads for High Quality at Low Price

EIGHT years of service to Chandler owners, a hundred thousand of them now, have proved Chandler worthiness. The one Chandler motor, developed and refined throughout these eight years, stands out notably among sixes. And the known Chandler policy of best quality at lowest price is exemplified in the Chandler car of today.

Standing back of this car, and responsible for its superiority, is one of the notably strong organizations of the motor car industry. An organization whose purpose has always been to build a car that shall live and multiply its friendships.

Seven handsome types of body are mounted on the one standard Chandler chassis, all of them roomy and comfortable, splendidly upholstered and with lustrous finish. Some one of them will meet your requirements.

We shall be pleased to mail you complete catalogue

THE CHANDLER MOTOR CAR COMPANY
CLEVELAND, OHIO

Export Dept.: 1819 Broadway, New York Cable Address: "CHANMOTOR"

SEVEN SPLENDID BODY TYPES

Seven-Passenger Touring Car	\$1930
Four-Passenger Dispatch Car	2010
Four-Passenger Roadster	1930
Two-Passenger Roadster	1930
Seven-Passenger Sedan	3030
Four-Passenger Coupe	2030
Five-Passenger Limousine	3530
Cord Tires Standard Equipment	
(All Prices F. O. B. Cleveland)	

CHANDLER SIX

Famous For Its Marvelous Motor

"Mention The Geographic—It identifies you"



“What! My Car?”

Weed Tire Chains



“Yes! Skidded—and it’s up to you. You failed to provide the chauffeur with Tire Chains. Only good luck saved your wife from paying the supreme penalty for your negligence. She’s on the way to the hospital, painfully injured, but the doctor thinks she’ll pull through.”

How strange it is that disaster must come to some men before they realize that all tires will skid on wet pavements and muddy roads when not equipped with Chains.

The time to provide against accidents is before they happen. Don’t wait until after the first skid. Put Weed Chains on all four tires at the first indication of slippery going and you will have quadruple protection against injury, death, car damage and lawsuits.

AMERICAN CHAIN COMPANY, INCORPORATED

BRIDGEPORT  CONNECTICUT

In Canada: Dominion Chain Company, Limited, Niagara Falls, Ontario
Largest Chain Manufacturers in the World

The Complete Chain Line—All Types, All Sizes, All Finishes—From Plumbers’ Safety Chain to Ships’ Anchor Chain

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DISTRICT SALES OFFICES: Boston Chicago Philadelphia Pittsburgh Portland, Ore. San Francisco



“Mention The Geographic—It identifies you”



Endurance

power to continue despite the hardships
of service and beyond the limits of
its 1½ years written guarantee



EVEREADY STORAGE BATTERY

A Superior Product by the Makers of the Famous Eveready Flashlights

AMERICAN EVER READY WORKS of National Carbon Co., Inc.

Service Stations Everywhere LONG ISLAND CITY, N.Y. Service Stations Everywhere

Atlanta — Chicago National Carbon Co., San Francisco, California

**WHENEVER YOU BUY STORAGE BATTERIES, FLASHLIGHTS AND BATTERIES,
DRY BATTERIES, AUTO LAMPS OR METERS, INSIST ON GETTING EVEREADY**

"Mention The Geographic—It identifies you"



DODGE BROTHERS BUSINESS CAR

A Business Car built with the
same conscientious thoroughness
that characterizes all of Dodge
Brothers products

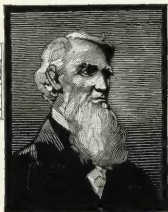
It will do what it is intended to do in
an efficient and economical manner

The haulage cost is unusually low

DODGE BROTHERS, DETROIT



THE SCIENTIFICALLY BUILT WATCH



AARON L. DENNISON

President of American Watchmaking and the Waltham System of Standardization

ACCURACY

The Twelfth Part of a Human Hair as a Standard of Measurement

IMAGINE the twelfth part of a human hair being the difference between Waltham standardized accuracy and the variable guess work in foreign watches.

Waltham produced, by Waltham genius, methods of measurement and gauges to measure so infinitely accurate that the Waltham Watch became and is the most perfectly constructed watch in the world.

If in the lower plate (illustrated) there was a measurable difference between the location of one bearing from another, it would mean irregularity in the time-keeping performance of that watch. Such a minute error cannot occur in a Waltham Watch without discovery.

When you buy a Waltham you own a watch that can be readily, and what is most important to you, perfectly and economically repaired—at an upkeep cost at least 50 per cent lower than the repair of foreign made watches.

This is one more good reason why you should own a Waltham.

This story is continued in a beautiful booklet in which you will find a liberal watch education. Sent free upon request to the Waltham Watch Company, Waltham, Mass.



Standing Gauge



Lower Plate



Pendant
and Bow
Patented



Waltham Colonial A

Extremely thin at no sacrifice of accuracy
Maximus movement 21 jewels
Riverside movement 19 jewels
\$200 to \$325 or more
depending upon the case

WALTHAM

THE WORLD'S WATCH OVER TIME

Where you see this sign they sell Waltham Watches

Douglas Fir
Northern White Pine
Idaho White Pine
Western Soft Pine



Western Hemlock
Washington Red Cedar
Red Fir and Larch
Norway Pine

EXPERT LUMBER SERVICE FOR THE MAN WHO WANTS TO BUILD

HERE is a service of the greatest practical importance to the family looking forward to owning its home.

To the farmer for his house, barns, corn cribs.

To the industrial man and corporation, planning expansion, replacements, repairs—or using lumber in manufacture.

A service that may add 100% to the value of your lumber purchase—whether you buy a couple of boards, a truck load of dimension stuff, or think in terms of millions of board feet to the single order.



This service means nothing less than expert advice in using the *right wood* in its *proper place*—based on detailed scientific knowledge of the various species of wood, their strengths, their fitnesses, and their individual action under specific conditions of use.

It may be a new thought to you, for instance, that in building a house lumber must be selected for three totally different functions.

There is the *framework*—which requires strength above all else.

There is the *outside finish*—demanding durability under exposure to the weather.

And the *inside trim*—where the need is for a wood properly seasoned and prepared, that will “stay put”, and that will be attractive when stained, or will take and hold paint or enamel.

For each of these functions certain woods are especially adapted.

For some, cheaper woods will give as good service as more expensive species. In other instances, cheaper woods can be used only at a sacrifice of durability and ultimate economy.

The same principle—the *right wood* in its *proper place*—applies to farm buildings, industrial buildings, and all industrial uses of lumber.

The proper use of lumber was never more important to America than it is at this moment.

To the individual citizen it means durable and economical building.

To the nation at large it means still more—a great step toward an *ample supply of lumber*, present and future—the elimination of waste in the thoughtless use of lumber.



What we advocate is conservation and economy through the use of the right wood in its proper place.

To this end we will supply to lumber dealers and to the public, any desired information as to the qualities of the different species and the best wood for a given purpose.

This service will be as broad and impartial as we know how to make it. We are not partisans of any particular species of wood. We advise the best lumber for the purpose, whether we handle it or not.

From now on the Weyerhaeuser Forest Products trade-mark will be plainly stamped on our product.

When you buy lumber for any purpose, no matter how much or how little, you can look at the mark and know that you are getting a standard article of known merit.

Weyerhaeuser Forest Products are distributed through the established trade channels by the Weyerhaeuser Sales Company, Spokane, Washington, with branch offices and representatives throughout the country.

WEYERHAEUSER FOREST PRODUCTS SAINT PAUL • MINNESOTA

Producers of Douglas Fir, Western Hemlock, Washington Red Cedar and Cedar Shingles on the Pacific Coast; Idaho White Pine, Western Soft Pine, Red Fir and Larch in the Inland Empire; Northern White Pine and Norway Pine in the Lake States.

“Mention The Geographic—It identifies you”



Ideals A heating plant sightly and shining, with the swiftest response to her slightest touch. So clean that the loveliest gown is not blemished, so economical that it SAVES 33⅓% OF THE FUEL . . . it owns a proud right to its name. There is a type and a size for your home; see it for your own sake, but even more for hers. For all her ideals of comfort and warmth are richly fulfilled in this new IDEAL Type "A" Heat Machine.

Catalog
Write Dept. 55

AMERICAN RADIATOR COMPANY NEW YORK and CHICAGO

"Mention The Geographic—It identifies you"

Before Visiting Europe

Send for

"The American Traveler in Europe—1921"

A 64-page Booklet, invaluable to the traveler, gives reliable information on present-day travel conditions in Europe, illustrated and with map. Sent free to prospective European Travelers.

Round the World Tours

Round the World with the American Express is the last word in travel arrangements and party management. All conditions are now favorable and every arrangement completed for 1921-1922. There will be three tours from San Francisco, August, September, October; and four tours from New York, October, November, December and January. Write for booklet.

China—Japan—Philippines

Spring and Summer Sailings for Wisteria Time and when the Lotus is in bloom. Take your summer vacation in the Far East. Small parties will be leaving San Francisco in April, May and June. Write for booklet.

Wherever you travel carry those spendable everywhere—American Express Travelers Cheques.

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TRAVEL DEPARTMENT
65 Broadway
New York



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One can live without art—but not so well.



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Prophet of
Joy

"Your troche will last but a little while if you just sit down and watch her smile."

Great range to choose from, including PILGRIM SUBJECTS and ADAM'S HOLY GRAIL.

We send on approval.
\$2.00
to
\$100.00.

Your Old Family Portraits reproduced privately in the Copley Print process add distinction, indeed photographs, linotypes, kodaks, etc. Make unique gifts to your relatives. Particulars in Catalogue.

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CURTIS & CAMERON, 75 Hancock Street, BOSTON
Salesroom: Pierce Building, opposite Public Library



The Lure of the Outdoors

How many people there are who would like to have a little camp in the woods or near the seashore, where they can live a life of independence and ease for a few weeks or all Summer long—people who dislike the expense and conventionality of a smart hotel life, and yet return to it year after year because they have no place else to go.

To these people the Bossert Sport Camp makes an instant appeal, for it is the ideal small house for the seashore or woods. Its cost, \$300.00 F. O. B. Brooklyn, is little when compared to the expense of living at a Summer resort, and the materials used in its construction and the care with which the house is fabricated will make it last for years.

Containing three rooms, it has ample space for two men or a family of three. Outside is stained with creosote to preserve the wood, and the Bossert method of construction guarantees perfect fit of all parts and enables any amateur to erect it.

Catalogue showing many other attractive models sent on receipt of 13 cents.

LOUIS BOSSERT & SONS, Inc.

1313 Grand Street

Brooklyn, N. Y.

"Mention The Geographic—It identifies you"

From the Sahara to the Ritz



IN THE TENT of a Bedouin on the sands of Sahara, or over the counter of the Ritz in London—as fare on a junk in Hong Kong Harbor, or on an American Pullman

American Express Travelers Cheques *Are Good As Gold*

BETTER THAN GOLD since they are never questioned, never discounted and *safe*, because they are worthless without your counter-signature of identification.

FAR BETTER THAN GOLD since, added to the money value of these sky blue cheques of the American Express Company is the magical influence and the service to travelers of this Company's world-wide organization with its thousands of correspondents all over the world and offices in the principal seaports and inland cities.

WHEREVER YOU GO—before you go—change your money. Insure it against loss. And above all give it the magical value guaranteed by this service—sky blue in color, true blue in sentiment.

FOR TRAVELERS in Great Britain or France, 5 and 10 £ Sterling and French 200 and 400 Franc Cheques are best. They are proof against fluctuating exchange, and unscrupulous money dealers. In the United States and Canada the Dollar Cheques. Buy them at Express offices or your own bank.

AND FOR ALL JOURNEYS you can secure your steamship tickets, hotel reservations and itineraries, or plan your cruise or tour, through the American Express Travel Department.

American Express Company

65 Broadway, New York City

"Mention The Geographic—It identifies you"

New York Life Insurance Co.

(Incorporated under the laws of the State of New York.)

346 and 348 Broadway, New York, N. Y.

DARWIN P. KINGSLEY, President

Balance Sheet, January 1, 1921

ASSETS		LIABILITIES	
Real Estate	\$8,407,481.00	Policy Reserve	\$759,017,764.00
Loans on Mortgages	154,795,325.60	Other Policy Liabilities	26,552,728.77
Loans on Policies	147,499,247.07	Premiums, Interest, and Rentals pre-	
Loans on Collateral	6,865,500.00	paid	4,233,320.03
Liberty Bonds and Victory Notes ..	109,722,115.37	Taxes, Salaries, Rentals, Accounts,	
Government, State, County, and Mu-		etc.	7,270,905.89
nicipal Bonds	141,539,552.50	Additional Reserves	6,733,083.67
Railroad Bonds	343,293,117.30	Dividends payable in 1921	37,446,654.87
Miscellaneous Bonds and Stock	8,418,460.10	Reserve for Deferred Dividends	76,176,646.00
Cash	20,574,203.04	Reserves, special or surplus funds not	
Uncollected and Deferred Premiums ..	13,711,710.24	included above	49,232,393.96
Interest and Rents due and accrued ..	12,087,598.25		
Other Assets	51,186.72		
Total	\$966,664,397.19	Total	\$966,664,397.19

During 1920 the Company Paid

To Beneficiaries	\$35,453,758.67
To Living Policy-Holders	79,395,838.63
Total Policy Payments	\$114,849,597.30

Dividends amounting to

\$37,446,654.87

were authorized by the Directors and will be paid in 1921.

Over 200,000 new members (including former policy-holders who increased their membership) joined the Company in 1920, representing a total new business of

\$693,979,400.00

The largest new membership in the history of the Company. The New York Life Insurance Company is what its name implies, A LIFE INSURANCE COMPANY. It transacts no other form of insurance. Its policies furnish the broadest coverage and provide

For payment of face amount upon due proof of death.

For payment of double the face amount in event of Accidental death.

For life income to the insured who becomes totally and permanently disabled.

There is a great opportunity in this Company for energetic, educated young men who desire to enter our business as a life work. For full particulars address either the Home Office of the Company or one of its Branch Offices.

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American Telephone & Telegraph Company

Boston Advertiser, October 19, 1876

ORIGINATED in 1876, incorporated in 1885, the growth of the company has been continuous, consistent and conducted on sound business lines, until today a service is given to nearly twelve million subscribers or approximately one telephone to each nine of population. What was then an experiment is now a necessity.

The stock of this company is selling on the New York, Boston and Chicago Stock Exchanges at approximately \$100, pays \$8 per share on each share of stock outstanding, and at this price yields 8 per cent.

This income is free from taxation in many states, and is free from Normal Federal Income Tax.

We shall be pleased, on request, to answer any questions you may ask us concerning the company or execute any order you may give us for the purchase of the stock.

KIDDER, PEABODY & COMPANY

115 DEVONSHIRE STREET
BOSTON, MASS.

18 BROAD STREET
NEW YORK, N.Y.

FOUR CENTS.

TELEPHONY.

AUDIBLE SPEECH CONVEYED TWO MILES BY TELEGRAPH.

PROFESSOR A. GRAHAM BELL'S DISCOVERY—A SUCCESSFUL AND INTERESTING EXPERIMENT—THE RECORD OF A CONVERSATION CARRIED ON BETWEEN BOSTON AND CAMBRIDGEPORT.

The following account of an experiment made on the evening of October 9 by Alexander Graham Bell and Thomas A. Watson is interesting, as being the record of the first conversation ever carried on by word of mouth over a telegraph wire. Telephones were placed at either end of a telegraph line owned by the Walworth Manufacturing Company, extending from their office in Boston to their factory in Cambridgeport, a distance of about two miles. The company's battery, consisting of nine Daniell's cells, was removed from the circuit and another of ten carbon elements substituted. Articulate conversation then took place through the wire. The sounds, at first faint and indistinct, became suddenly quite loud and intelligible. Mr. Bell in Boston and Mr. Watson in Cambridgeport then took notes of what was said and heard, and the comparison of the two records is most interesting as showing the accuracy of the electrical transmission.

Source: Boston Advertiser, October 19, 1876.

Mr. Bell—What do you think is the matter with the instrument?
Mr. Watson—What do you think is the matter with the instrument?



Crane laundry tub equipment is supplied in types and sizes to meet all requirements.



On Country Estates

Crane Service is never of greater value than on country estates, where it enables owners and architects to select quickly, completely and through one central source of supply, practically everything needed for the extensive heating, plumbing and sanitation systems, the refrigerating and water plants and piping installations for the lawns and gardens.

The necessary equipment can be selected at any of the Crane branches and exhibit rooms, and can be obtained through the heating and plumbing trade.

We are manufacturers of about 20,000 articles, including valves, pipe fittings and steam specialties, made of brass, iron, forged steel and all purposes, and are distributors of pipe, heating and plumbing materials.

THERE IS A NEARBY CRANE BRANCH TO GIVE YOU CRANE SERVICE

CRANE CO.

836 S. MICHIGAN AVE. CHICAGO
VALVES-PIPE FITTINGS-SANITARY FIXTURES

CRANE EXHIBIT ROOMS

23 W 44th ST. and 22 W 43rd ST. 1105-1107 BOARD WALK
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Branches in which the Public is cordially invited
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NEW YORK
HAMILTON
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WASHINGTON

SYRACUSE
BUFFALO
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FIRST MORTGAGE NOTES

STABLE security for First Mortgage Notes is found in the improved real estate of Washington—The Nation's Home Town—where property values are sound. The present month marks the fifty-second year of our dealings in these First Mortgage Notes without loss to an investor. This record is made possible, first, by the character of the securities dealt in and, second, by the conservative and tested practices of our organization in making the loans. We confine our loans to improved real estate which bears substantial evidence of increasing values. The safety of our notes outweighs the tempting allurements of speculations. The rate of return is based on the lessons of experience, which indicate the maximum consistent with assured safety.



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SEVEN TWENTY NINE FIFTEENTH STREET
Washington, D. C.
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IN times like the present, one factor in investment is more important than all others.

That factor is safety

Safety is the best buy in the market today. Where can you find it? The record of S. W. Straus & Co.—39 years without loss—shows you where. Investigate this record. Write today for

Booklet D-1108

S.W. STRAUS & CO.

Established 1882 Incorporated

New York - 150 Broadway

Chicago - Straus Building

Offices in Fifteen Principal Cities

39 years without loss to any investor

Copyright, 1921, by S. W. Straus & Co.

You Should Have Our Booklet, "6% and Safety."

6%
Tells all about this old, conservative Company which has paid 6% on Time Certificates for 26 years and 5% on Certificates payable on demand. Certificates always at par, easily cashed and protected by first mortgage.

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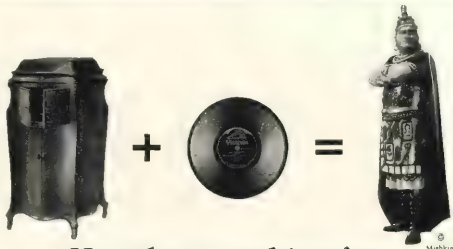
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MODERN PERSIA AND ITS CAPITAL

And an Account of an Ascent of Mount Demavend, the Persian Olympus

BY F. L. BIRD

For five years American college instructor in Teheran

A LONG series of catastrophes has failed to bring to a final anticlimax the Persian chapter in the world's historic record. The crushing impacts of Greek, Roman, Arab, Mongol, and Russian armies could never quite remove the epic charm from the story of Persia and her people; and now another world upheaval renews a waning interest in the trend of her affairs.

Babylon, Assyria, and Chaldea rose to power in rapid sequence, served their day of world dominion, weakened, and quickly disappeared. Persia, following in their footsteps, elevated southwestern Asia to still higher eminence as the center of civilization and empire; struggled with Greece for European hegemony; disintegrated; but maintained its entity, through a diverse ebb and flood of fortune, down to the present day.

Darius would fail to recognize as his mighty empire the narrow limits of modern Iran, its borders now far withdrawn from the waters of the Oxus and the Indus, from the shores of the Mediterranean and the widespread Mesopotamian plains; but the nucleus still is there in territory, race, language, and customs.

PERSIA IS THREE TIMES THE SIZE OF
FRANCE

Persia of today includes within a territory still three times the size of France

ancient Media, mountainous Parthia, and the province of Fars, whence sprang her first great dynasty. Such monuments to the glory of the great kings as the ruined capitals of Susa, Persepolis, and Ekbatana still stand on Persian soil (see map, page 418).

The majority of the present inhabitants, although tinged with the blood of Greek, Arab, Turk, and Mongol conquerors, are the lineal descendants of the original Iranian, or Aryan, population, and speak a language which has for its basic element the ancient Persian tongue.

The Mohammedanism of their Arab conquerors penetrated to the foundations of Persian life, and the ravages of Turk and Mongol often threatened their very existence, yet their national characteristics and culture have time and again triumphed over their oppressors.

Time after time, as the centuries passed, Persia has drawn together her scattered provinces and with surprising virility, renewed now and again by the infusion of foreign blood, has forced back the contracting circle of encroaching enemies; but during the last century the increasing power of her neighbors, combined with her own decay, has definitely turned the scale against her and she has drawn behind her last barriers—the mountains and deserts which doubly guard the western portion of the Iranian



Photograph by Roland Gorbald

A PERSIAN GENDARME

The police service of Teheran was entrusted to Swedish organizers in 1913. The gendarmerie numbers 8,400 men. Before the World War, Russian officers trained the Persian army.

plateau, a lone remainder of her inheritance (see map, page 418).

Sultan Ahmed Shah, the one hundred fifty-sixth "king of kings," sits on the tottering Persian throne, while the future of his kingdom rests in the hands of outside powers.

A VAST, MOUNTAIN-RIBBED DESERT PLATEAU

Modern Persia, with the exception of the prosperous northwest province of Turkish-speaking Azerbaijan and the semi-tropical region between the Elburz Mountains and the Caspian Sea, can be characterized as a vast, mountain-ribbed desert plateau, studded here and there with oases which most frequently form ribbons of fertile green fringing the desert at the bases of sterile mountain slopes from whose snow-clad summits comes the life-giving moisture.

The encircling mountain walls shut out the rain from the central table-land. Rivers with sources but no mouths flow half the year and lose themselves in the parched desert wastes.

The density of population is less than that of Texas, and more than half the country is an uninhabited Sahara, some of it unexplored. Much of the remainder is suitable only for sheep-grazing part of the year, thus forcing upon a fourth of her ten million people a semi-nomadic existence between the high, well-watered mountain valleys in the summer and the warm plains in the brief winter season.

Some of these tribes, like the Kurds, rarely leave their mountain homes, where they exist independently of central government control. Others, like the Ghashgais and Bakhtiari, sometimes by coercion and sometimes through necessity of political alliance, are vassals of the state, although they pay allegiance only to their chiefs, who arrange with regal authority for their followers the matters of taxes and military service.

Cities are naturally few and small, there being but two or three of more than 100,000 inhabitants. The lower mountain valleys and the oases are the centers for both town and agricultural population, and the wonderful fertility of these scattered areas, snatched from the blighting grasp of the desert, forms the basis



PERSIAN WOMEN IN INDOOR COSTUME

This modified ballet attire was introduced from Europe in the latter part of the nineteenth century. The story is told that Naser-ed-din Shah, upon attending the opera in Paris during a European visit, was much attracted by the ballet and ordered that the entire front row be purchased at once for his harem, which already contained several scores of carefully selected beauties. Disappointed in this desire, he had to be content with the adoption of the ballet skirt by the ladies of his harem, whence the new fashion rapidly spread.



Photograph by Roland Gorboid

A BEAUTIFUL TRIBESWOMAN OF BAKHTIARI
LAND, WEST OF ISPAHAN

She is a pure Iranian type, rare in these days. Her costume is a negligée worn only in the home. These tribeswomen are not secluded; they ride and shoot like the men, and, of course, wear a more practical costume, including balloon-like trousers, when in the saddle.

for the startling contrasts in the climate of this unusual country.

Water is the chief concern of the Persian peasant. Wherever he can divert the flow of a mountain stream or build a crude canal from a well or spring, a small portion of the desert becomes a paradise and he prospers. Certain of these regions are said to be among the most fertile in the world, producing in abundance not only the finest of wheat and barley, but grapes, apricots, peaches, nectarines, pomegranates, figs, and melons which are unsurpassed among the fruits of the Temperate Zone. Cotton and tobacco thrive, and roses, as well as other flowers, gloriously deserve the frequent association of their names with that of Persia.

A LAND OF CONTRASTS—ROSE GARDENS
AND DESERT

It is the desert contrast that has made the Persian poets sing of rose gardens and of nightingales. Dwelling in a land of barrenness, where the cooling shade of trees, the refreshing greenness of vegetation, the life-giving productiveness of the soil itself are possible only by struggling years of human toil; where only high mud walls guard tiny groves of elms, chinars, and poplars, so carefully reared along priceless flower-edged water-courses, from the encroaching waste without, is it to be wondered at that they cherish these artificial beauty spots and idealize them as typical of heaven itself?

The day is at hand, as one of the by-products of the war, when Persia is to begin to learn from British experts, not only how to reclaim more desert land by building better aqueducts and by throwing barrages across mountain gorges to store the surplus of the spring freshets, but how to establish closer communication with the outside world and to develop her great potential resources.

Lacking in the energy, initiative, and cooperative spirit necessary to develop their country themselves, the Persians have suffered from the jealous rivalry of their neighbors, and from a seclusion forced by nature, but belied by their central geographical location, in all the recent history-making disturbances in the Near and Middle East.

In spite of her position as a veritable

Asiatic Belgium, Persia is strangely cut off from world intercourse by those same natural barriers which so affect her climate.

PERSIA'S FIRST HIGHWAY BUILT IN 1900

At the opening of this century not a single highway suitable for wheeled conveyances pierced the mountains to the plateau. Handfuls of foreign officials and infrequent venturesome travelers made their toilsome way by caravan over tortuous passes to the Persian capital or to other Persian cities, and the Persians themselves for the most part stayed at home. But about 1900 a government-subsidized Russian company opened a post-road, as a military-commercial venture, which climbed from the Persian port of Enzali, on the Caspian Sea, to the capital city, Teheran.

Five years ago three or four post-carriage routes and a narrow-gauge railway running five and a half miles from Teheran to a suburban shrine were the only competitors of the picturesque but slow-moving caravan.

Then came the pressure of the World War. Russia rapidly substituted a military railroad for the old carriage route from her Transcaucasian boundary to Tabriz, the provincial capital of Persian Azerbaijan; but again the mountains intervening between this projecting north-western corner of Persia, with its Tatar population, and the Persian-speaking portion of the country, have prevented this from being of more than local advantage.

HOW THE WORLD WAR REDISCOVERED PERSIA

It was a more famous road, however, over which Persia's neutrality became a mere expression. Almost from the dawn of history a great international highway has held its threadlike course through the plains of Mesopotamia from Babylon, Ctesiphon, and Bagdad to the western scarp of the Zagros Mountains, spiraled up this mountain stairway, and continued its way down trenchlike mountain valleys, over wind-swept passes, under the great Behistun rock, which still bears the triumphant inscriptions recorded by Darius and his successors, and through



Photograph by Roland Gorbold

A LUR TRIBESMAN FROM THE MOUNTAINS OF WESTERN PERSIA

These nomadic inhabitants of Luristan are the lineal descendants of the old Iranian stock of the time of Darius and Xerxes. This young man's tribe is indicated by his figured sash, which has been carefully adjusted from a twenty-yard length of cloth.



Photograph by John B. Jackson

THE LAGOON OF ENZALI, PERSIA'S CHIEF SEAPORT ON THE CASPIAN SEA

The first glimpse which the Western traveler gets of Persia on approaching Enzali from Baku is an impressionistic one—thatched or red-tiled roofs of the low-lying town, a wealth of wide-branching trees, and in the distance the dusky, cloud-mantled mountain range which bars entrance to the desert hinterland, the real Persia.



Photograph by E. K. De Witt

NATIVE CRAFT IN A PERSIAN HARBOR

This is Piri Bazaar, at the upper end of the lagoon leading inland from the Persian port of Enzali, on the Caspian Sea. Here shipments bound for the interior receive their final transfer to caravan, cart, or motor lorry.



ALONG THE HIGHWAY FROM ENZALI TO RESHT

"Near fragrant orange groves, past lily-padded lagoons, and through flower-carpeted jungles alive with an endless variety of semi-tropical song-birds and water-fowl, the traveler proceeds from Enzali to Resht" (see text, page 365). The journey is usually made in a Persianized Russian drozky.



Photographs by John B. Jackson

A PERSIAN PEASANT'S HOME NEAR RESHT

Water is the chief concern of the Persian peasant. Wherever he can divert the flow of a mountain stream a small portion of the desert becomes a paradise and he prospers (see text, page 356).



Photograph from Foye Fisher

THE SHOPS AT RESHT, ON THE ROUTE FROM THE SEAPORT OF ENZALI TO THE PERSIAN CAPITAL

These queer little shops have their fronts open to the street. The shop-keeper sits where he can reach everything without rising. Resht is a town of 60,000 inhabitants, with sodden roofs, narrow alleys, and crumbling walls.

great cities on whose sites stand modern Persian towns, across the Iranian plateau.

Making its way eastward, where the foothills of the Elburz Mountains meet the northern edge of the great central desert of Persia, it passes by way of Meshed, Merv, and Bokhara into central Asia and on to the borders of China. In time of peace it has served as a thoroughfare of commerce between Mesopotamia and China; in time of war it has directed the march of armies.

The war chariots of Cyrus and Xerxes rumbled over it, Alexander led his cohorts along it to Asiatic conquest, Persian liberty and religion fell before the Moslem Arabs who surged through this gateway in the seventh century. Still later it gave too ready passage to the devastating Mongol hordes of Hulagu and Genghis Khan; then, as Persia's power declined and ocean trade routes opened up, this highway accompanied its builders into sad dilapidation.

But once more, with the outbreak of the World War, remote Persia came within a scheme of world conquest; and German, Turkish, Russian, and British armies fought along this crumbling highway, where Turkish ox-carts in retreat outdistanced the motor trucks of the Russians.

Before the war was over a new, well-macadamized road existed, built by the British Royal Engineers—a road which is but the forerunner of a railway, already in operation to the Persian frontier near Kasr-i-Shirin, that will connect Teheran, and eventually all of Persia, with the Bagdad Railway at Bagdad.

So the war has rediscovered Persia and brought new prominence to the affairs of its capital.

A CITY AS OLD AS PERSIAN HISTORY

No one knows how long there has been a city where this modern capital stands. It has not always been called Teheran, and it has not always been in quite the same spot; but a city has existed in this locality as far back as Persian history records, for so suitable a location could not well be overlooked.

The present city stands 3,810 feet above sealevel, at the foot of the inner slopes of the Elburz Mountains, which

rise at this point nearly 13,000 feet. To the southeast is the great, lifeless desert, shaped like a huge hour-glass, 900 miles in length, from the foothills of the Elburz range, in the north, almost to the Indian Ocean, in the south, and ranging in width from 300 to 100 miles.

This untraversable wilderness determines this point as the junction of the great trunk route from Mesopotamia into the East, the north and south road through central Persia, and the old caravan trail westward through Kazvin and Tabriz to the Black Sea.

TEHERAN HAS ARIZONA CLIMATE

Passes through the Elburz from the Caspian Sea converge upon Teheran from the east and west; and water, whose presence is of such supreme importance in the location of a Persian city, is here in abundance. The annual rainfall is only ten inches, but in the mountains which overshadow the city are springs, wells, and rushing streams; and not far to the northwest and northeast the Karaj and Jajrud rivers burst from their mountain gorges to irrigate the rich surrounding plains which produce the city's food supply.

The district, which lies in about the latitude of Cape Hatteras, has a temperate, healthful climate which is invigorating and pleasant during nine months of the year. The three summer months are excessively hot and dry, but if one wishes the luxury of a summer resort, it is necessary only to load one's belongings on a string of donkeys or a springless cart and move six or eight miles to one of the cool mountain villages, where the six or seven hundred members of the foreign colony and many of the Persians take refuge from the heat.

Teheran weather is similar to that of Arizona, but several degrees cooler, both in summer and winter. The nights are always cool, the sun shines nearly every day of the year, the winter is brief and moderate, and the long spring and autumn are like those seasons in delightful southern California.

Although occupying an ancient site, Teheran is a very modern city. It has been the capital of Persia only a little more than a century, and has been an



Photograph by John B. Jackson

ON THE HIGHWAY FROM RESULT TO TEHERAN, 70 MILES FROM THE CASPIAN SEA BY AIR-LINE, BUT 240 MILES BY CARRIAGE ROAD
The trip over the mountains is made at a cost of 50 cents a mile, but the varied scenery and the thrills of travel in the "debris of a couple of a long-forgotten era" is worth the price (see text, page 367).

important metropolis for a much shorter time than that. Rhages, or Rei, its predecessor in this district, was a populous city of ancient Media, thrived in the middle ages, is said to have had a population of one and a half million, and to have been the largest city east of Babylon, but found itself too centrally located for its own permanence and continued prosperity, when the Mongols swept through western Asia.

When the inhuman Agha Mohammed Khan, after a bitter civil war, in 1793 founded the Turkish dynasty which now rules over Persia, he did not dare to establish the seat of government at a spot so far removed from the pasture lands of the Kajars as Shiraz, the former capital. So Teheran, which not only commanded the highways of the plateau, but also the entrance to the Elburz passes leading to this tribe's original possessions on the southeastern shores of the Caspian, became the capital of the Kajar kings.

At that time the new capital, which had been wiped out by the Afghans in 1723, consisted of not more than three thousand houses of sundried brick. A European traveler who visited Teheran in 1796 wrote that, "In spite of Agha Mohammed's efforts to induce people to settle and merchants and manufacturers to establish themselves there, the



Photograph by J. W. Cook

TWO AMERICAN WOMEN TRAVELING A LA MODE IN PERSIA

These two-passenger vehicles, called *kajacchas*, resemble chicken coops balanced on the back of a diminutive horse or donkey (see text, page 371).

population does not amount to more than 15,000 souls, including a garrison of 3,000."

But once the prestige of the new dynasty was established, this mud-walled hamlet grew with amazing rapidity, considering the decadence of its surroundings; and today, with its 300,000 inhabitants and its foreign colony representing at least a score of nationalities, it is not only the metropolis of Persia, but a city of considerable international importance.

The substitution of internal peace for anarchy in the country was bound to repopulate this productive district, but the shifting of trade routes westward, through the rise of Russian commerce, largely restricted Teheran's commercial importance to that of a local distributing center. It grew, therefore, like Washington or Petrograd, because it was the capital; because the Kajars were ruling with a firm, steady hand, and because Persia was being forced into the widening commercial and political plans of the great powers.

"THE FOOT OF THE THRONE"

The Persians commonly refer to Teheran by its title, "The Foot of the Throne." As the Kajar sway extended,

all the chiefs of the royal tribe, all the great nobles, wealthy land-owners, and famous generals, and all the hungry office-seekers—in fact, all those who wished to bask in the sunlight of royal favor—crowded into Teheran and set up their lavish establishments. With them came their obsequious hordes of parasitical clients, and after them the poets, scholars, buffoons, and quack scientists, a shabby band of flattering pensioners who by nimbleness of wit would live by royal or noble patronage.

The leading merchants and architects and the most highly skilled artisans of the country found ready employment, and the bazaars began to resound with the metallic tapping of the silversmith from Shiraz and the coppersmith of Ispahan, to be scented with the pungent-smelling product of the Hamadan tanner and to overflow with the wares, not only of Persia, but of Manchester, Birmingham, and Moscow.

Naser-ed-din Shah, who ruled justly and well for 47 years, till in 1896 he was removed by the hand of a fanatical assassin, traveled extensively in Europe and introduced many modern western institutions to beautify his capital, such as broad streets, substantial buildings, frock



Photograph from F. L. Bird

THE "MORNING EXPRESS" LEAVING TEHERAN ON PERSIA'S FIRST FIVE MILES
OF RAILWAY (SEE TEXT, PAGE 387)

In 1916 a Russian company opened a 67-mile railroad from Julfa, on the Perso-Russian frontier, to Tabriz, and the British Government is now cooperating with Persia in the construction of railways, but for more than a quarter of a century this little narrow-gauge line running from the southern end of Teheran across the hot plains to the village of Shah Abdul Azim, the seat of a golden-domed shrine, was Persia's only railway.

coats, ballet skirts for the feminine population, and a dozen or more foreign legations and consulates.

During his long, peaceful reign the city outgrew the old mud walls which had inclosed it within a four-mile circuit. They were torn down, the moat filled in to provide more building sites, and a larger and more extensive earthen embankment, pierced by twelve great gates and surrounded by a huge dry ditch, was thrown up, giving the city its present size and contour, that of an irregular octagon more than twelve miles in circumference.

The new area quickly filled, and now the city has outgrown this latest boundary and residences are springing up outside the wall, which soon will disappear, like other obsolete oriental institutions, to provide for necessary modern growth.

For very obvious reasons, travel agencies do not feature Teheran in their world tours. Nevertheless it is usually quite accessible, if one will tolerate a little discomfort while getting there. At least nine-tenths of all travelers to Teheran

use the Caspian port of Baku in Transcaucasia as a jumping-off place.

With good luck, in peace times, one can reach Baku over the uncertain route via Constantinople and the Black Sea to Batum, and thence by rail through Tiflis, the capital of the new Republic of Georgia.

THE FIRST GLIMPSE OF PERSIA SUGGESTS
SUMATRA

Baku itself is the capital of Azerbaijan, another of these precocious backyard republics, which, by the way, is not identical with the neighboring Persian province of the same name. Its importance as the center of a great oil district has given it, in spite of its polyglot population of Tatars and Armenians and the fifty-seven other varieties of the Caucasus, a familiar and prosperous western appearance. But upon embarking on the little Russian steamer which navigates the Caspian between Baku and the leading Persian seaport of Enzali, one takes passage to another world as surely as though crossing the Styx.



Photograph by John B. Jackson.

THE NEWER, OR NORTHERN, PORTION OF TEHRAN BOASTS A TRAMWAY

Wide, well-graded streets, electric lights, motion-picture theaters, European shops, and semi-Western architecture distinguish this section of the Persian capital from the southern section, with its great bazaars, narrow, twisting alleys, and blind-fronted adobe house walls (see text, page 371).

The first appearance of Persia is disconcerting, because it does not look like Persia. It agrees very well with what one might expect of Mindoro or Sumatra, but the standard requirements for the "Land of the Lion and the Sun" are conspicuous by their absence.

Soon after the uncertain haze to the south has resolved itself into shore-lines, comes one's first impressionistic glimpse—the thatched or red-tiled roofs of the low-lying town; then a wealth of wide-branching trees, the outposts of a dark, enveloping mass of jungle; and behind this, and rising swiftly to unbelievable height, the dusky, cloud-mantled mountain range which bars entrance to the desert hinterland, the real Persia.

If the exotic luxuriance of vegetation and the careless primitiveness of the thatched huts and rustic booths of the inhabitants disturb your preconceived visions of the country, you will find them fading with shocking suddenness at your first introduction to its population, when the boat ties up at the pier and an ill-smelling rabble of ragged, half-naked villains swarms on board to wrangle about getting your luggage ashore.

A courteous, frock-coated Persian official, conventionally crowned with what appears to be a cross-section of an opera

hat, passes you through the ceremonies of the custom-house, and in a brief space of time you are rolling inland in a Persianized Russian drosky, near fragrant orange groves, past lily-padded lagoons, and through flower-carpeted jungles alive with an endless variety of semi-tropical song-birds and waterfowl.

Arrival at the city of Resht after a twenty-mile ride of the rarest kaleidoscopic loveliness is certainly a transition from where every prospect pleases to where only man is vile.

The sixty inches of annual rainfall, which have made the surrounding country a Garden of Eden, have conspired with man's inventive genius to turn this town of 60,000 inhabitants, with its sodden roofs, narrow, slimy alleys, and crumbling walls, into an odorous, undrained mudhole, a veritable Slough of Despond to any one with such lofty illusions of Persia as those of a certain disgusted American traveler who had gone all the way to Arnold's "majestic Oxus stream" only to find it muddy.

A 240-MILE MOUNTAIN TRIP TO ADVANCE
70 MILES

The trip over the mountains, with its ever-changing variety of unusual sensa-



Photograph from Faye Fisher

THE PERSIAN MERCHANT SEEKS THE BUYER IN THE HOME

The striped articles on the business man's shoulder are bath towels, which consist of large cotton squares. It is a common sight to see men with these towels wrapped around them coming from the public baths.

tions, even at fifty cents a mile, is worth the price.

Teheran is only seventy miles south of the Caspian, but the road must climb and twist for 240 miles in order to arrive there.

At the post-house your means of transportation awaits you. You clamber gingerly into the débris of what may have been in a long-forgotten era a very elegant and commodious coupé, but which now, with your variegated assortment of luggage lashed to every available projection, approximates more closely an itinerant peddler's van than anything else.

A dark-visaged bandit, whom you have been regarding with suspicion, pours a pail or two of water on the warping wheels and axles for lubricating purposes, clambers to the driver's box, leans back from under his huge, pot-shaped felt hat, grunts to the four gaunt ponies harnessed abreast, and you clatter off with a jangle of bells along the well-built Russian road to Teheran.

Theoretically, if one travels day and night, the trip requires a day and a half; actually, about twice that long. At sixteen-mile intervals there are exasperating delays, capable of abbreviation by the judicious use of *baksheesh*, in the changing of horses and drivers, to say nothing of the additional halts while the driver has his tea or pipe of opium at a roadside tea-house or ties up a broken spring or dilapidated harness with a bit of rag. But, unless the whole equipage rolls over a cliff while the *kismet*-trusting coachman takes a nap, you are almost certain to turn up eventually at the walls of Teheran.

THE HOME OF THE HYRCANIAN TIGER

From the oppressive humidity of the region of the rice-fields, the road gradually ascends to the shade of the deep forest belt, whose labyrinth of close-growing trees and interwoven giant creepers forms a dark, silent lane, with impenetrable green walls, into which the carriage intrudes with its ceaseless rumble of heavy-tired wheels and the constant jingle of the pony bells.

Perhaps a passing band of hunters, with a freshly killed wild boar or leopard,

serves to break the solitude and to remind the traveler that from this very jungle, which extends without a break for hundreds of miles along the northern slopes of the Elburz, came the fierce Hyrcanian tigers used by the Roman emperors for their spectacular contests of the arena.

Sometimes the road follows the Sefid Rud, or White River, the only stream to break its way through to the Caspian from the plateau; or leaves it to follow the brink of a canyon.

The abruptness of the ascent increases; the forest area is left behind; thriving vineyards, bearing luscious seedless and skinless fruit, cover the hillsides; occasional clumps of olive trees appear, and frequent groups of tattered peasants stare curiously at the infidel invader in the passing carriage.

The aspect of the country now changes rapidly. All signs of habitation, except a few wretched dugouts, disappear, and the old coach climbs heavily, over barren rocks, to the bleak summit of the pass, 7,000 feet above the sea.

TRAVELING BY THE LIGHT OF THE PERSIAN MOON

The journey by daylight is novel, by night it is weird. The dubious accommodations at the post-houses render the extreme night cold and the uncertainties of the dark road the lesser of two evils; so perchance the traveler finds himself bowling along the upper reaches of the pass in the soft light of the Persian moon, which smoothes the jagged outlines of the surrounding crags, works fairy magic with the snow patches on the neighboring peaks, and reveals the silver flood of near-by dark-walled gorges.

The night wears on and the moon slips down behind a distant ridge, leaving the cool, gray stars to light one on the way. With only the monotonous roll of heavy wheels to break the perfect stillness of the night, a dreamy, drowsy feeling creeps over one, when out of the darkness and far away there comes a faint suggestion of strange, uncanny music; and as the night breeze freshens, it bears a deep and rhythmic ringing, which slowly grows in volume until the mellow donging of a hundred swinging bells pro-



Photograph from Faye Fisher

THE "HOKEY POKEY" PEDDLER OF THE WEST HAS HIS COUNTERPART IN THE
HOT-SOUP VENDER OF PERSIA

These peripatetic caterers to hungry youths and adults do a thriving business on the streets
of Persian cities morning, noon, and evening.



Photograph from Faye Flishe

A PERSIAN WATER-CARRIER AND HIS SHEEPSKIN JUG ON HIS ROUNDS TO SERVE
THE THIRSTY

The entrances to many Persian doorways are rather attractive with the mud bricks joined by blue cement. The quaint door-knockers are admired by all foreigners.



Photograph from Faye Fisher

AN OPEN-AIR RESTAURANT IN PERSIA

These public cooks are preparing mutton, which is cut in small pieces, skewered on a long iron pin, and broiled over hot beds of charcoal. It is very delicious. The flat sheets on the ground at the right, resembling bits of paper or cloth, are pieces of native bread which comes in strips only a half inch thick but two and a half feet in length. A piece is torn off and the mutton *en brochette* when well done is taken off the pin and eaten with the bread.

claims the near approach of a camel caravan.

Then comes the *mush, mush* of padded feet; shadowy, ungainly forms loom out of the darkness, and camel after camel shuffles past, bearing a slumbering driver swaying aloft in the folds of his rough felt mantle.

After a rapid descent through barren gullies comes a sweeping view of actual Persia.

Broad, brown, rolling plains extend beyond the limit of vision, even in the clear, thin air of the plateau, and the naked southern scarp of the mountains shows not a vestige of green. At lower levels irrigating ditches, which seem to flow uphill, sluggishly follow the curving hill-sides; orchards and mud-walled gardens begin to appear; and before long the turquoise domes and crenellated walls of the city of Kazvin come in sight.

Passing through a gaudily tiled gateway (see Color Plate VI), the route leads along a wide avenue shaded by beautiful plane trees to a pretentious and much-ornamented building, which is nothing more nor less than the post-house and hotel, where one may actually occupy a spring bed or eat a passable attempt at a European dinner.

A large portion of the last ninety miles between Kazvin and Teheran is a monotony of drab, stone-covered waste, of which the road itself is an almost indistinguishable part.

The route is level and parallels the great northern mountain rim of the plateau. The only sign of approach to an important city is the increasing traffic on the road, not only of the leisurely mule and camel caravans, but of primitive prairie schooners, with wild-looking, shaggy-hatted drivers, and bare-legged villagers driving strings of heavily laden little donkeys to market.

Even an occasional Persian family, evidently moving to the metropolis, jogs along, the head of the family astride an undersized mule, which is enveloped in capacious saddle-bags bulging with copper kitchen utensils; the good wife, fetchingly attired in lavender hose and balloon-like trousers, perched on a pile of bedding under which labors the counter-part of her husband's mount, and the numerous offspring distributed between two huge chicken-coops slung on the flanks of a diminutive, moth-eaten donkey.

THE SUDDEN TRANSITION FROM DESERT TO CITY

So sudden is the transition from desert to city that before one realizes that the journey is at an end he finds himself clattering across the stone causeway over the moat toward the most surprising of gateways, a great multicolored façade overlaid with a gay mosaic of glistening tiles and topped with numerous minarets ornamented in the same fashion. Over the iron-bound gate itself is wrought in glazing of many colors some stirring scene from Persian mythology, and the flanking walls are niched with tiled and arched recesses.

Teheran is one of those numerous cities between the Near and the Far East which

calls for a modification of Kipling's oft-quoted line; for here East and West have met, but have not mixed.

WITHIN THE WALLS OF TEHERAN

Undoubtedly the strongest impressions for a stranger to the Orient when first entering the city are those made by the wide, shaded avenues, with their bordering high mud walls inclosing beautiful gardens and palatial residences, as contrasted with the noisy, primitive street life itself.

For the most part the buildings, the homes of the middle class, are of one- or two-storied, flat-roofed, adobe construction, many of them plastered dingy white or pale blue or pink and with projecting balconies. At intervals rows of slim poplars project above the street walls, and through a stately gateway one gets a glimpse of conventionally ordered flowers and shrubbery, spraying fountains, and the brick or stucco residence of some Persian prince or noble.

Outside, along the streets there is the hubbub of an overgrown Persian village, increased by the clatter of carts and droskies, and the raucous shouts of impudent hucksters, mixed with the importunate chattering of repulsive beggars.

In the city, as in the country, the ugly wall is a symbolic dividing line between present-day development and yesterday's primitiveness.

The northern portion of the city, built up largely during the last generation, is quite different from the southern, or older, section. This newer part, the product of western influence, has many wide, well-graded streets, some of them lined with elms and plane trees; and it boasts of a tramway, electric lights, motion-picture theaters, hotels and restaurants, European shops, and numerous respectable buildings of semi-Western architecture.

In this area are located some of the government buildings, the foreign legations, the homes of the foreign residents and of most of the wealthier Persians, numerous foreign business and philanthropic institutions, including the large American mission schools and hospital, and also the small Armenian and Parsee quarters.



Photograph from Faye Fisher

THE ALMOST BLIND LEADING THE REALLY BLIND IN PERSIA

There are many blind persons in Persia, owing partly to the intense light rays of the sun. Tradition gives the following origin for the wearing of veils by Mohammedan women. One day when the Prophet was seated with his favorite wife, Ayesha, a passing Arab admired her, expressed a wish to purchase her, and offered a camel in exchange. This experience so angered Mohammed that the custom of requiring women to wear veils resulted.



PERSIAN LADIES LEAVING A PUBLIC BATH-HOUSE PRECEDED BY A DOMESTIC SERVANT
Every Friday is "bath day" in Persia, and a bath is obligatory before the faithful can worship. Frequently there is a public bath attached to the mosque.



Photographs by Lt.-Col. Alfred Heineker

PERSIAN WOMEN IN CHADARS

Both Christian and Mohammedan women wear the *yashmak* (veil) out of doors, but the *chadar* (*chuddar*), or enveloping garment, is peculiar to the followers of Mohammed.



Photograph from Fays Fisher

A REPAST IN THE WOMEN'S QUARTERS

Persian women have their faces unveiled only in their quarters, where no men trespass. The meal consists generally of a thick soup and bread. A piece of bread is broken off and used as a scoop, for very few people use silverware. The kalan, or water-pipe, is smoked by both men and women (see also Color Plate VII). It is so arranged that the smoke goes first through the water, which purifies it before it is taken into the mouth. The tops to these pipes are frequently studded with turquoise.

The southern part of Teheran is an undisturbed bit of old Persia—the great bazaars, the narrow, twisting, dirty alleys with their filthy gutters, the blind-fronted adobe house walls, and the unkempt, sickly people, who stare or hoot at the foreign interloper, all representative of that major portion of Persian city life as yet untouched by Western ways.

ARTILLERY SQUARE IS THE HEART OF TEHERAN

The city centers around a large public plaza, the Maidan-e-Toop Khaneh, or Artillery Square, which has been developed into a public park, where a number of antiquated cannon, the spoils of former conquests, are exhibited.

Fronting the eastern end of this square is the headquarters of the British-managed Imperial Bank of Persia, a striking building of gayly adorned Perso-European architecture. Facing the square on the other three sides are arched and balconied military barracks.

Six important avenues lead, through brilliantly tessellated, arched gateways, from this inclosure. From the north-eastern corner Khiaban-e-Lalehzar, or Tulip Field Avenue, the chief business street, runs north, past the post-office and custom-house. From the corresponding northwestern corner the Khiaban-e-Alaed-Dowleh, along which are located many of the important legations and the two European hotels, parallels this street.

Long tramway streets run east and west; from the southeastern corner a busy thoroughfare leads to the bazaars, and through the southwestern gateway passes the broad, tree-arched Khiaban-e-Almasieh, the Avenue of Diamonds, to the royal palace.

The palace, with the treasury, foreign office, royal college, telegraph department, and various other government buildings, is located within the old, mud-walled citadel.

One is struck by the abundance of clear, flowing water in the well-kept palace gardens, and although the buildings themselves are architecturally and structurally disappointing, they are substantially built of brick and exceedingly interesting because of their bizarre and fantastic exterior and interior decoration.

The royal museum is well worth a visit, for in a somewhat amusing conglomeration of trinkets, ranging all the way from an American company's sewing-machine advertisements to a collection of mechanical clocks, there are many rare treasures, among them being the sword of Tamerlane, the famous jeweled globe, and either the original or a replica of the jewel-studded Peacock Throne supposed to have been taken by Nader Shah in the sack of Delhi.

Teheran's handicap as a modern city is felt in her lack of fine historic institutions. There are no mosques or religious colleges of any distinguished antiquity or holiness, although modern ones are numerous. The finest is the Masjid-e-Sepahsalar, which was built by a former prime minister. It stands in the northern part of the city, near the Baharistan Palace, at one time the residence of this same official, but since the granting of the Constitution in 1906 occupied by the Persian Parliament.

TEHERAN HAS ITS AVIATION FIELD

A somewhat unusual point of interest is the great Maidan-e-Mashk, or Drill Square, a forty-acre military parade ground in the midst of the city, not far north of the central square, which is one of the largest inclosures of its kind in the world. At present it is used chiefly as a race-course, and by the young Persians, who are enthusiastically adopting this Western game, as a football field. It is also proving an admirable flying field for recently introduced airplanes.

There is a splendid, unobstructed view of the great mountain range north of the city from this large field, as well as of the mighty snow-clad cone of Demavend, which, off to the northeast, holds its solitary position nearly four miles upward in the clear blue heavens (see text, pages 393 to 400).

However unalterable the laws of the ancient Medes and Persians may have been, it would be incorrect to speak of present-day Persia as unchanging. The traveler who reaches this conclusion after noting habits and customs handed down from Achæmenian times has failed to consider that the passing Persian civilization never reached the submerged masses



Photograph by E. K. De Witt

RELIGIOUS PROCESSION ON THE 10TH OF MOHARRAM, THE GREATEST ANNIVERSARY
OF THE PERSIAN YEAR

Moharram, the first month of the Mohammedan year, is for the Persian Shia Mohammedans a month of mourning. The procession shown in the illustration commemorates the death of Hosein, son of Ali and Fatima and grandson of Mohammed, who was barbarously slain while attempting to gain the caliphate. This anniversary is observed with a vast amount of mourning and a sort of Persian passion play. Crude floats depict the scenes of the tragedy, and effigies on biers represent the torso and gory head of the murdered Hosein.

of the people, and that the new and more penetrating Western civilization has had time, as yet, merely to touch the surface.

The streets and bazaars of Teheran are picturesque examples of all the stages in the transformation which is now taking place.

WHERE MOTOR CAR MEETS CAMEL

A luxurious motor car dodges a camel or two and a drove of donkeys laden with charcoal or street refuse, and draws up at the main entrance of the Hotel de Paris on Ala-ed-Dowleh Avenue. The distinguished occupants descend and make an unceremonious break for the doorway; but before they can reach its protective shelter they must run the gauntlet of a swarm of indescribably filthy professional beggars, who claw at their garments and wail for alms in the

name of the Prophet or the Holy Virgin. Or perhaps a fawning creature, clutching at the bridle of a patient ass draped with a dubious collection of Persian rugs, waylays the party and calls upon the *Sahib* to note the quality of his rare assortment of antique carpets.

The corner, on this avenue, at the southeastern end of the stately British Legation garden, is also a favorite haunt of the proletariat; for the location has two indispensable requirements for comfortable outdoor Persian existence—an abundance of shade, where a perspiring pedestrian can squat to munch a refreshing cucumber on a scorching midsummer afternoon, and a warm south wall, where even in crisp January a tormented citizen can pause and leisurely remove his upper garment to pursue the elusive ceremonies of the chase.



Photograph from Faye Fisher

A GROUP OF MOURNERS OBSERVING THE RELIGIOUS FESTIVAL OF MOHARRAM
BY FLAGELLATION

The men who participate in the rites in honor of the assassinated Hosein (see illustration on opposite page) work themselves up to such a pitch of frenzy that they go through the streets shrieking and striking their heads with long knives.

At such vantage points a mendicant dervish, sketchily garbed in a tattered crazy-quilt, is usually on hand to croak "Ya Hakk" at the passerby (see Plate VIII).

THE POMPOUS PERSIAN GROCER AND HIS
STOCK

The narrow cross-street from this interesting corner to the northern end of Khiaban-e-Lalehzar, one square to the east, passes a number of typical native groceries. These are merely large stalls set in the street wall, with almost the entire stock in trade exhibited at the broad entrance—long cones of sugar and strings of very-much evaporated figs suspended overhead, and matches, soap, and trays of rice, dried beans and fruits, raisins and walnuts displayed on the broad sloping counter, where the passer-by can bargain with the fat proprietor without entering.

The green grocer, also, has on display his entire assortment of lettuce, spinach, onions, tomatoes, pomegranates, apples,

oranges, peaches, grapes, and long, yellow melons—in fact, a very wide variety of seasonable vegetables and fruits—which he has grouped with natural art in a beautiful harmony of color in pleasing contrast to the dingy street. True, they are open to the flies and street dust, but this fails to annoy the average patron.

The pompous grocer himself is an imposing type in his flapping, capacious trousers and skirted robe, belted at the waist with a voluminous sash or shawl, green in color if by good fortune he is a descendant of the Prophet. He anoints his beard and finger nails with henna, and if he should lift his large, egg-shaped, black felt hat he would reveal a modish haircut that has left smoothly shaven a five-inch path straight back over the top of his head.

Khiaban-e-Lalehzar is Teheran's Fifth Avenue and the pride of all the inhabitants. In the evening this short street is thronged with male promenaders.



Photograph by E. K. De Witt

A STREET CROWD ON A RELIGIOUS HOLIDAY: PERSIA

This is not only an interesting study of Turko-Persian racial types, but also an entertaining exhibition of Persian headgear so useful in identifying the residence and class of the wearer, the rough felt dome of the peasant or artisan, the black pill box of the merchant or student, the skull cap of the porter, the white lamb's wool of the police officer, and the cushion-like turban of the ecclesiastic in the right foreground being but a few among a strange variety.

Fastidious, self-important Persian gentlemen of leisure, garbed in frock coat or flowing mantle, saunter along, jostling humbly dressed tradesmen or peasants, and an occasional Westernized Armenian family elbows through the crowd. But the hurrying European intruder usually takes to the street, where the faithful modern police force has had better success in training the drosky drivers to keep to the right than in regulating the confusion on the sidewalks.

Persian women are conspicuous for their absence, and if a few brazen ones do appear they suggest nothing quite so much as black shrouds tottering along on high-heeled slippers; even their faces are concealed by black horse-hair blinders.

The variety of architecture along this avenue is more striking than its quality. Modern shops, with show-windows dis-

playing actual European creations or their ludicrous imitations, alternate with junk-shops and second-hand stores, where every conceivable commodity can be unearthed, all the way from rusty opera hats to astronomical telescopes. It is the accepted custom for homeward-bound foreigners to dispose of their discarded effects, at a profit, to these enterprising traders; so it is not unusual to see the familiar last season's wardrobe of some legation-circle society leader dangling from a shop door as a ghostly reminder of the departed, later, no doubt, to adorn some brown-eyed harem beauty.

STREET LIFE SUGGESTS A TRAVELING CARNIVAL

The precursors of the popcorn wagon and the peanut-vender are there too. The man pushing the red and yellow perambu-



Photograph by E. K. De Witt

A SHIA MOHAMMEDAN SHRINE

The mural decorations, done in vivid color, represent scenes in Hosein's ill-fated attempt to gain the caliphate (see also illustration on page 376).

lator has rose-flavored ice cream to sell, and the gentleman industriously fanning the little charcoal brazier is dispensing another delicacy, hot-boiled potatoes, or possibly succulent slices of huge sugar beet.

All of this, with a wandering magician performing his amazing feats at one corner, and at the next, perhaps, a professional story-teller in the center of an entranced crowd, conveys the impression rather than a traveling carnival has come to town than that this is the customary life along the most prominent avenue of an important capital.

The bazaars possess a never-failing interest for the Westerner. Here a large part of the city's trade is carried on in what might be described as one immense, primitive department store. Under low, vaulted brick and mud roofs covering many acres of territory, the leading Persian merchants and craftsmen not only sell their wares, but manufacture many products as well.

More than twenty-five miles of narrow, arched passageways wind and twist past

literally thousands of small shops, which are merely alcoves, from six to twenty feet square, set in the flanking walls. Here and there archways in the wall open to caravanserais, which are large courtyards surrounded by arcades and ware-rooms, where caravans can be loaded and unloaded and the goods safely stored.

Round holes, which appear at regular intervals in the tops of the continuous series of domes forming the roof of the passages, let in dusty bars of dim light on the busy interior.

On a busy afternoon this labyrinth of half-lighted tunnels is crammed with a hurrying, shoving, noisy mob in which donkeys, camels, horsemen, and pedestrians mingle in a confused mass; and when a reckless carriage driver tries to force his way along, with shouts of "Khabar dar, khabar dar!" (Take notice, take notice!), there is a mad scramble of the crowd to flatten itself against the walls.

The dealers in different types of commodities have grouped themselves roughly



Photograph from Faye Fisher

THE LORD CHIEF OF THE PARSEES, OR FIRE-WORSHIPERS, OF PERSIA

The cashmere coat is both costly and picturesque. Lest they pollute the earth by burial, the Parsees dispose of their dead by placing the bodies in a Tower of Silence, which is situated on a hill far from human habitation, but accessible to the "corpse-eating dogs and birds."

in separate quarters, but each merchant has his own little hole in the wall, where he squats on the elevated floor beside his small show-case, or, if his shop be more pretentious, exhibits his goods from behind a counter.

The customer makes his purchases standing in the public thoroughfare; and the process is a complex one, for often prices cannot be agreed upon even after protracted bargaining.

Individual initiative and skilled hand production still prevail in Persian industry, and the sections of the bazaar occupied by the master craftsmen, who execute the delicate gold and silver filigree-work, the unique engraved copper ware, or other native products are exceedingly interesting.

PERSIA IS NINETY-EIGHT PER CENT
MOSLEM

Since Teheran is the capital and has drawn its rapidly growing population from throughout the whole country, it affords an easy opportunity to acquire a general idea of the religious groups to be found in Persia.

Nearly 97 per cent of the population of Teheran and more than 98 per cent of that of all Persia is Moslem. In Teheran there are about 5,000 Jews and 4,000 Armenians. Nearly all, however, of the fewer than 100,000 nominally Christian population of Persia live in the western part of the province of Azerbaijan.

A remnant of the old Zoroastrians, or Fire Worshipers, of pure Iranian stock, still exists within the confines of Persia, and 400 of these ten or eleven thousand who have remained faithful to the ancient Persian religion reside in the capital. They are distinguished as being better business men and more honest than the Mohammedan Persians, and their women have greater freedom.

Especially among the military class are found many representatives of the two million people of predominating Tatar blood in northwestern Persia.

BY THEIR HEADGEAR YE SHALL KNOW
THEM

Every city, town, or district of any importance is sure to have sent enterprising citizens to the capital, and there are

picturesque representatives of numerous tribes as well. The readiest means of distinguishing the latter is by their distinctive headgear.

The Kurds, of whom there are 600,000 in the country, wear hats which look for all the world like huge, inverted black coffee-pots bound round with gay silk handkerchiefs. The Bakhtiaris, from the mountains in the direction of the British oil fields, in southwestern Persia, whose chiefs maintain a numerous retinue in Teheran, wear white felt preserving kettles. In fact, a dissertation on masculine Persian headdress (women are not allowed to wear hats) would give a ready key not only to recognition of the different races of Persia, but even of the different classes of society, since hats are rarely removed except when the owner sleeps, and vary in appearance and dimensions from the huge, pillow-like turban of the *mollah* or lady's woolly muff of the Persian Cossack to the round, brimless felt or lambskin cap worn by the middle and upper class urban residents.

The tribesmen especially have splendid, powerful physiques. While the Persians of the peasant and working classes are of medium height and sparsely but solidly built, a large portion, in particular of the city population, has degenerated through poverty, vice, and the use of opium. And the urban upper class, because of a very sedentary, idle, overfed life, inclines to obesity, the present shah being a good example. Large brown eyes, dark complexions, and straight black hair are dominant characteristics of the entire Persian population.

MOST OF TEHERAN LIVES IN APARTMENT-
HOUSES

The great mass of the Teheran population lives in apartment-houses. This may seem strange or impossible, considering the forced seclusion of women; but it is a natural requirement of city life, and the poor women have to move about as unobtrusively as possible.

The typical apartment-house is of one-story, mud-brick construction, built around a court, in the center of which is usually a tank or pool of water.

The rooms, or apartments, all open upon the central court and in the ma-



Photograph by John B. Jackson

THE CURTAIN BEFORE THE THRONE IN THE PALACE COURT-YARD AT TEHERAN
The alabaster throne of the Shah (see opposite page) is under open skies.

majority of cases are lighted only by the entrance or an additional small latticed window. The single street entrance is a tunnel-like passageway into the courtyard. A family may occupy one whole side, but more commonly just a single mud-floored, mud-walled room, which rents for perhaps one dollar a month; and only this trifle makes a large hole in the monthly income of an unskilled laborer who receives but thirty cents a day.

Even in these lowly dwellings, however, the Persian's artistic sense and love of natural beauty assert themselves, for almost always there are potted plants and a tiny, carefully tended flower bed in the sunny area of the court.

IN THE AIRY PALACES OF THE RICH

What a contrast are the rich, airy palaces of the grandes, their white columns and porticos gleaming invitingly through the luxuriant green foliage of stately gardens. At a distance they convey the general impression of magnificence and wealth but close at hand most of them recall the imposing but crumbling St. Louis or San Francisco Exposi-

tion edifices as they were at the end of their term of service. There is much that is tawdry about them, and a great part of the really skillful and artistic workmanship in their architectural adornment is wrought in fragile plaster, which soon deteriorates.

The impressive structure which occupies the dominant position in the great garden is the *berun*, the abode of the male members of the family. In the rear of the premises, where the average American usually has his garage, is located the unpretentious *anderun*, or harem, the humble retreat which shelters and segregates the numerous feminine adjuncts of the household.

There are several national institutions, as yet unmentioned, which are exceedingly essential to Persian life—the bakery, the public bath, the tea-house, and perhaps the ice factory.

THE BAKER WHO OVERCHARGES IS BAKED IN PERSIA

Wheat bread is the most important, almost the only, food of the Persian masses on the plateau. Rice is the staff of life in the Caspian Sea region and a favorite



Photograph from Faye Fisher

THE SHAH OF PERSIA'S MAGNIFICENT ALABASTER THRONE

From this famous dais Persia's ruler holds his New Year's reception (which takes place in March). The ministers of all the countries having diplomatic relations with Persia are present on this occasion, wearing their court costumes, and it is a brilliant assemblage. The Shah sits in a jeweled armchair on the throne and the court poet (in his official regalia, which consists of a long coat of beautiful cashmere) reads his greetings. The Shah's band plays throughout the celebration.

delicacy throughout the country when prepared in the form of a Persian *pilau*, but it is second in importance to bread as a staple article of diet.

Bread is prepared in a number of ways, but the most approved variety in Teheran must be baked in the large ovens of the public bakeries. The dough is spread on huge mounds of red-hot pebbles, comes out deliciously crisp, in thin sheets thirty inches long, and is displayed on sloping counters at the street entrances to the shops (see illustrations, pages 449-450).

The method of government price control of this important factor in the cost of living is gruesomely effective when put into operation. The path of the profiteering baker is precarious, for he is sometimes thrust into his own oven and nicely browned.

The evidence of one's eyes might not rate the public bath in Persia as an important institution, but it is indispensable; for by religious law it is incumbent upon the devout Moslem to bathe at least

once in ten days. The fact that in the cheaper baths there is a common pool the water of which remains unchanged for months at a time would seem to militate against the sanitary value of the performance, but the high temperature to which the water is raised no doubt has a more or less valuable sterilizing effect.

The street entrances to the baths are entertainingly marked by lines of varicolored bath-cloths, groups of semi-nude attendants, and mural paintings resembling in spirit and color the comic section illustrations of American Sunday newspapers. The fuel employed in heating the baths—dung collected from the streets and dried in cakes—is but one example of the many ingenious economies practiced by the resourceful Persians.

THE TEA-HOUSE IS THE PERSIAN CLUB

The tea-house is the democratic Persian's political and social club, a splendid institution for which we have no adequate equivalent in America. It is every-



Photograph by Day Tashir

PERSIANS ASSEMBLED FOR THE SHAH'S NEW YEAR'S DAY RECEPTION

The City Palace of the Shah, easily decorated with floral designs, is in the heart of Tehran. It is one of many palaces of the Persian potentate and is used chiefly for state functions.



Photograph by E. L. Bird

SMALL TRIBAL WANDERERS OF PERSIA

This little group belonged to an encampment of nomads in a mountain valley near Teheran. While big sisters are making butter in the hairy goatskin churn and mothers are doing the day's laking in their earthen ovens, it has fallen to the lot of these small lassies to keep the camp babies out of mischief. Large brown eyes, dark complexions, and straight, black hair are characteristic of the entire Persian population.



Photograph by E. K. De Witt

DERVISHES OR MOHAMMEDAN MENDICANT PRIARS

These holy men are members of one of the Mohammedan brotherhoods of dervishes. Having forsaken all their worldly goods, they are dependent for their livelihood on the liberality of their co-religionists. The small axe, the calabash receptacle, the gnarled staff, and the small hand-woven bag carried by the pair are distinctive insignia of these picturesque wanderers.



Photograph by J. W. Cook

A FUNERAL PROCESSION IN HAMADAN

The closely veiled Persian woman in the foreground has so far forgotten her modesty in her curiosity to view the bier of the deceased Persian dignitary as to lower a fold of her domino and thus reveal a portion of her countenance to public gaze. Hamadan is the ancient Ekbatana, the home of Esther and Mordecai.

where—in the city, in the village, even along the desert caravan trail. Here the harassed business man or weary traveler can refresh his careworn soul with a glass of tea, a leisurely cigarette or water-pipe, and a bit of light gossip or exchange of current news with fellow-beings of kindred spirit.

The tea-house may be in external appearance anything from an adobe hut with a few crude benches to the glorified cafés of Lalehzar, but it always possesses those unfailing essentials, a big, brass Russian samovar, an adequate collection of little tea-glasses, bright-colored saucers, and filigree spoons, a bubbling hubble-bubble or two for public use, and a

genial atmosphere of camaraderie reminiscent, perhaps, of the obsolete American bar-room.

The ice factory is merely a mud wall, two stories high instead of one, throwing a cold shadow on a puddle at its northern side in winter. The stored product is neither crystal nor clean, but it serves to cool many a refreshing glass of Persian sherbet during the thirst-compelling dryness of the withering summer's heat.

PRIMITIVE ENGINEERING PROVIDES TEHERAN WITH WATER

The problem of food and water supply for a city nearly as large as Washington, D. C., without railway or steamship communication, without modern machinery of any kind, without even such primary essentials as farm wagons and cast-iron water pipes, has been solved very ingeniously by the people of Teheran. The water system especially is a marvel of primitive ingenuity.

The unusual topography of the plains about Teheran always arouses the traveler's curiosity. Row after row of earthen craters, which look like series of gigantic ant-hills or, perhaps, entrances to the subterranean abodes of mammoth moles, lead toward the mountains. These mark the courses of the underground aqueducts, which bring the mountain well or spring water a distance of from five to ten miles to the city.

After the source of supply is located, a party of *moqannis*, or professional well-diggers, sinks a line of narrow shafts, at intervals of about one hundred yards and often to a depth of more than one hundred feet, all the way from high mountain levels to the interior of the city, and joins the bottoms of these shafts along a stratum of impervious soil which will retain the water.

These primitive engineers join their tunnels underground without even the use of a compass and accomplish the whole tremendous task with merely a crude windlass, a bit of rope, and a few small picks, shovels, and canvas sacks. Thirty or more of these burrowed channels convey the entire water supply to Teheran, including that used for irrigating purposes.

It is the delivery end of the system which is deficient. The water is run about the city in open ditches, collected in pools, or impounded in huge underground reservoirs, from which it is transported in large skins, by water-carriers, to private houses.

The mysterious little brooks that magically appear and vanish along the city streets are a refreshing sight when there has been no rain for months, and they afford a ready supply for the street-sprinkler with his big dipper, the thirsty populace, and the busy laundress who wishes to rinse out a few garments. But the dangerous and disgusting pollution results in much otherwise avoidable illness.

The mean flow of water the year round is estimated at nearly one million gallons per hour, which if properly utilized would be abundant; but, with the winter supply too large and the summer supply too small, the distribution unequal, and the wastage in open ditches and by leakage so great, there are portions of the city which in the dry season receive no water whatever.

PERSIA'S FIRST RAILWAY, 5½ MILES LONG

An account of Teheran would be incomplete without some mention of the first Persian railway and its route. This abbreviated narrow-gauge line runs from the southern end of the city, five and a half miles across the hot plains, past the ruins of ancient Rei, to the village of Shah Abdul Azim, the seat of a famous golden-domed shrine which attracts great crowds of excursionists on every holiday.



Photograph by J. W. Cook

A PERSIAN MULLAH OR TEACHER: NOTE HIS HENNA-DYED BEARD AND NAILS

Absurd as its antiquated equipment may appear, this road has one important advantage over many great American railway systems in being able to earn a generous return on its capital investment.

Of the famous old city of Rhages, or Rei, founded, according to tradition, in the fourth-millennium before Christ, capital or metropolis of many dynasties, advanced base of Alexander the Great in his campaign against Darius III, and the birthplace of the mother of Zoroaster and of Haroun-al-Raschid, all that remains are a few ruined walls still massive in their decay. An occasional cultivated field or garden dots the site, and here and there inquisitive treasure-hunters have excavated the old house walls.



A GROUP OF PERSIAN SCHOOL BOYS AT HAMADAN

While modern schools are increasing, the old *Makhtab Khaneh*, with the Arabic Koran as the text-book in the primer class, is still a national institution (see illustration on opposite page). More than 98 per cent of the people of Persia are followers of Mohammed.



Photographs by J. W. Cook

A GROUP OF ARMENIAN AND PERSIAN SCHOOL GIRLS

Probably 95 per cent of the women of Persia are illiterate, but in recent years foreign educators, and since the war the Persian Department of Education, have done much to promote the cause of education for Persian girls. It has only been within the last few years that girls have been allowed to attend the mission schools. Formerly they were married at the age of ten or twelve.



Photograph from Faye Fisher

A PERSIAN SCHOOL FOR BOYS

Schools such as these are scattered through the shopping districts of Persian cities. They resemble shops with one side all open to the street. The teacher sits at one end with a long stick which he uses on the boys if they stop studying aloud for a moment.

A noted spring gushes from under the broken ramparts. Chashmah-i-Ali, or The Fountain of Ali, it is called, in honor of Ali, the son-in-law of Mohammed. Above it is a modern rock carving, and near by a palimpsest replacing a Sassanian bas-relief, both of them commemorating the reign of Fath Ali Shah, who ruled in Persia a hundred years ago. Neither is of historic value except as a reminder of the conceited king who presumptuously obliterated the ancient and valuable inscription to provide for the record of his own supposedly greater glory.

TEHERAN'S TOWER OF SILENCE

To the northeast of Rei, on a bare, shelving hillside, the Zoroastrian Tower of Silence stands, visible from all the surrounding country.

On this circular, whitewashed tower, which is perhaps fifty feet in diameter

and thirty feet high, the modern Zoroastrians, according to ancient religious custom, expose the bodies of their dead to the vultures and the weather. Gruesome as this strange cemetery may seem, it is a better tribute to the still glowing embers of old Persian national life and customs than the mouldering walls of forgotten Rei.

In the case of Teheran, as of a great many other things Persian, distance lends enchantment to the view. The shaded avenue from a northern gate leads mountainward through bare, rolling foothills, past a deserted palace of a former shah, and ascends through cultivated fields, brown walled villages, and past the cool summer gardens of the legations, the Persian aristocracy, and the royal family, to the very base of the great inner wall of the Elburz.

Then a narrow bridle-path climbs sky-



A PERSIAN KHAN WITH HIS BODYGUARD

On account of the numerous bands of marauding bandits which infest the highways, a traveler in Persia does not venture forth without a guard of armed retainers.



Photographs by E. K. De Witt

PERSIAN HUNTERS WITH THE FRUITS OF THEIR CHASE, A WILD BOAR

The jungles in the semi-tropical Caspian Sea region fairly teem with wild boars, which render themselves doubly unclean and obnoxious to the Moslem peasants by their never-ceasing inroads on the rice fields. These doughty hunters have not only proudly demonstrated their skill with their antiquated flint-lock muskets, but are very evidently satisfied at having disposed of one more hated marauder.



Photograph by J. W. Cook

A SUMMER ENCAMPIENT OF PERSIAN NOMADS

Nomadic tribal life in Persia still exists even in the environs of the capital. Fully a fourth of the population of the country still dwell in their home-woven black tents, live on the product of their flocks and herds, and wander with the change of seasons from the warm plains in winter to the cold mountain valleys in the summer time.

ward over slides of shale, around boulder-strewn promontories, into an unexpected hollow, green with stunted willows about a spring, and up a breathless zigzag along a snow-fed rivulet bordered with purple iris, to the snow-streaked crest 12,600 feet above the sea. From there the view to the south commands a sweeping area of the plateau and, to the north, of the second great range in the triple wall which bars Persia from the sea.

Far down the desolate southern slopes, crevice-like gorges open, ground by the tread of the ages in the forbidding gray rock of the mountain side; and down these deepening canyons flow silent streams of greenest foliage, concealing foaming torrents and splashing waterfalls, and spreading, as they emerge from their narrow confines, to hide the crudeness of mud-walled hamlets.

On the open slopes of the low-lying foothills irrigated patches of wheat and barley stand out like the squares of a checker-board, or well-watered villages

gleam like emeralds in their yellow desert setting.

A dusty haze overhangs Teheran on the northern edge of the level plains, and beyond the sunlight falls on the ghostly burial tower and the gilded dome of Shah Abdul Azim. From the right the Karaj River bends in a threadlike, silver bow to the glimmering salt marshes far to the south, and distant mountains in-close the scene in a giant, bowl-like hollow.

A COMPLETE PANORAMA OF DEVELOPING CIVILIZATION

Within a twenty-five mile radius of Teheran a complete panorama of developing civilization unfolds, perfectly illustrating the whole shifting scale of human existence from the primitive to the modern stage. In the city itself are the conflicting institutions of modern society and Mohammedanism, along with an underlying stratum of unchanged primitive customs.



Photograph by Roland Gorboli

A PERSIAN WOMAN APPARELED FOR A PILGRIMAGE

The elaborately embroidered saddle-bag is a *khorjon*, in which both clothes and food are carried for the journey. The white veil over her face is the *yashmak*.

The railroad and the motor car have not yet won the competition with the camel and the donkey; and while modern schools are increasing in number and quality, the old *Makhtab Khaneh*, with the Arabic Koran as the text-book in the primer class, is still a national institution.

While Teheran is the seat of an experiment in representative government, most of the surrounding villages are a part of an oriental feudal system, as the property of the crown or the wealthy land-owning nobles. In these dreary, insanitary, adobe villages, still centers the Persian peasant life, an existence entirely

aloof from the modern world, dominated by bigotry and conservatism, and not yet ameliorated by medical science or enlightened education.

From their centralized abodes the peasants go each day to till the surrounding fields with tools and methods similar to those employed by their forebears. And within this same limited area rove rough, untutored nomads, self-dependent, prosperous in terms of flocks and herds, desiring no better shelter than the black wool tenting woven by their virile, unsecluded wives and daughters, but unconcerned with the affairs of state.

From the more progressive centers of Teheran and other important Persian cities waves of reflected enlightenment are moving in slowly widening concentric circles to reduce the divergence in present-day Persian life.

The rise of the present Kajar Dynasty was a final attempt to restore a conservative oriental despotism in the midst of a swiftly progressing modern world, and under the long, benevolent rule of Naser-ed-din Shah, who maintained order and obedience throughout the length and breadth of his kingdom, this anachronism gave strange promise of success; but the failure of his successors disclosed the futility of competing with antiquated equipment in the modern economic and political struggle.

The progressive element among the Persians realized their weakness, and in 1906 demanded and secured a constitu-

tional form of government; but they were illly prepared to combat internal anarchy and reaction or to resist the aggression of Russian imperialism.

International intrigue, with their country as a helpless tool, has prevented a fair test of the ability of the Persians, by their own unaided efforts, to restore the Persian state.

But now a new factor has appeared, as though Aladdin had rubbed his magic lamp, portending a rapid change in Persia's status—oil, which has brought wealth and progress to many an unpromising region. This, as well as undeveloped stores of copper, lead, iron, and other products, has attracted the foreign capitalist; and in these days of

dollar diplomacy there are bound to be railways and valuable concessions for this most-sought-for of all present-day commodities of commerce.

An overland rail route to India may soon become a reality, and plans are already complete for a railroad to Teheran.

The old Persia is swiftly passing. The new Persia is bound to be economically prosperous. The unsolved problem is the future of the Persian national life. The end of another generation will reveal either a Persian resiliency and moral strength sufficient to establish securely a modern state or merely another failing experiment in the decanting of new wine into old bottles.

AN ASCENT OF MOUNT DEMAVEND, THE PERSIAN OLYMPUS

ANY ONE who has carefully examined a small map of Asia has probably noticed as one of the few designated features of the portion occupied by Persia the rather striking name, Mount Demavend. The emphasis given to this spot by the absence of many other defined locations throughout the country is quite in keeping with its size, magnificence, and importance.

Demavend, which outrivals in proportions any mountain in Europe, is the highest peak in southwestern Asia, for it rises to an altitude of nearly 20,000 feet above sealevel. Whether viewed through the mists from the Caspian Sea or in the clear, thin air of the Iranian plateau, its snow-ribbed volcanic cone is a vision of surpassing splendor. But to realize its full grandeur one must see it from the crest of a neighboring range, where the eye can take in with a single sweep the unbroken rise from base to summit, or from some point a hundred miles southward across the desert, where it still dominates the hazy horizon long after the rugged outlines of its surrounding ranges have dissolved in the distance.

THE PARADISE OF ZOROASTER

Is it to be wondered at that such a superb landmark should hold a prominent place from the earliest times in the

legend and the superstition of the Iranian peoples?

As Mount Olympus in Greece was the home of the gods, so the paradise of Zoroaster was the summit of Demavend in Persia. Many legends have developed from its mysterious, fear-inspiring grandeur, important among which is that of the monster tyrant Zohak, who, halted in his worldwide tyranny, was chained, Prometheus like, upon this peak. This tale, which is found in the sacred writings of the Fire Worshipers and in Persian classical poetry, is still cherished in the folk-lore of the inhabitants; and so strong is the inherited superstition that even today the venturesome traveler is warned not to attempt the ascent of the mountain, because "the devils will get you."

Not only has this great mountain held a lofty place in mythology, but it has cast its far-reaching shadow over many epoch-making events in history. Almost at its very base (in the Median metropolis of Rhages) was born the mother of Zoroaster. It marks the eastern limit of the raids of the Assyrians before the rise to power of the great kings of Persia, and its frowning eastern face overlooked the mountain home of the rising Parthian Empire. Alexander the Great paused beneath it in his pursuit of Darius III



Photograph by E. K. De Witt

A PERSIAN PLOWMAN

In striking contrast to the sun-scorched desert, with its drifting sand and rock-strewn wastes and toiling, thirsty caravans, is this oasis-like garden, a paradise, as the Persians often call it, set down in the midst of barren wilderness. The slender, stately poplars and dense foliage in the background indicate the abundance of the watercourses, and the good natured smile of the young peasant plowman and the placid contentment of his beasts carry some idea of the productiveness of the fertile soil he is scratching with his crudely fashioned plow.

and sent expeditions through the neighboring passes to subdue the impregnable regions of Hyrcania. Following in his footsteps came Antiochus the Great against the Parthians, and westward along this same route Genghis Khan, Hulagu Khan, and Tamerlane led their ravaging Mongol hordes.

A GUIDEPOST FOR GENERATIONS

One can imagine that even Alexander or Tamerlane, sweeping on to world con-

quest, must have felt his insignificance as he faced this unconquerable barrier.

Rising not far from a great international highway, Demavend has served as a gigantic guidepost for scores of generations of daring merchants, who, long before Columbus, exchanged the wares of the West and the East by means of their slow-crawling caravans; and its lonely grandeur has gripped the imagination of intrepid adventurers of all ages. Within its shadow a score of great dy-

nasties have risen and fallen, and today it stands as one of the few remaining glories of the Persian Empire.

The Elburz Mountain range, of which Demavend is an outstanding member, is a unit in the great mountain system that stretches from southern Europe to central Asia, and, with regard to Persia, is the great dividing line between the northern limits of the Iranian plateau and the Caspian depression—a 12,000-foot wall separating a basin 81 feet below sealevel from a table-land averaging 4,000 feet in altitude. Beginning near Ardabil, in Azerbaijan, it extends southeastward and eastward more than 500 miles along the southern shores of the Caspian and into Khorasan.

This great mountain wall gives northern Persia the anomaly of two almost contiguous but quite different climates. The moisture of the Caspian basin is excluded from the interior, resulting, on the northern side, in a semi-tropical climate, with an annual rainfall of over 50 inches and luxuriant orange groves and crops of rice and cotton, and, on the mountain sides themselves, dense forests of hardwood, while the southern escarpment is barren and supplies scarcely enough water for the narrow but fertile desert fringe at its base, with its crops of grain and fruits of the Temperate Zone.

A QUIESCENT VOLCANO

Demavend itself is about 45 miles northeast of Teheran, in the central of three parallel chains. It towers high above these flanking mountains, whose summits do not exceed two-thirds its elevation, the only mountain peak among endless series of ridges. Its conical form and seemingly even slope of about 45 degrees from top to bottom at once indicate its volcanic nature.

Although there is no record of an eruption in historic times, the volcano can be called quiescent rather than extinct, for about the base are numerous hot springs, and at the summit one finds evidence of volcanic heat at no great distance beneath the surface.

While from a distance its cone seems to taper almost to a point, it really terminates in a bowl-like crater about one hundred yards in diameter, which is almost

entirely filled with snow. The internal heat is sufficient to melt the snow about the summit, and thus uncover to view masses of basalt and limestone rocks and huge deposits of sulphur.

Strange to say, the exact altitude of Demavend still remains uncertain. Numerous measurements have been made, ranging from 18,000 to over 22,000 feet, an average of the most reliable giving an altitude of about 19,000, though the single measurement commonly accepted is 18,464 feet.

THE ASCENT

For a mountain of this size, the ascent cannot be considered especially difficult, there being few obstacles other than the cold, the rarity of the atmosphere, and fatigue.

Because of the superstitious awe with which the inhabitants regard the mountain, very few of them have tried to scale it, and it requires the inducement of a month's salary to secure a guide for the climb, if one can be found at all. The first European to make the ascent was William T. Thomson, in 1837. Since then it has been accomplished by several Europeans, by three Americans, and in 1914 by seven Persian boy scouts.

Late summer, with its settled weather and minimum of snow, is, of course, the best time of the year for the ascent. Although Teheran, the nearest large city, is the logical point of departure, the precipitous nature of the western scarp necessitates a circuitous approach. A three-day trip takes one across the first range of mountains by the Afcheh Pass, with an elevation of 9,000 feet; then, between the two ranges, down the well-watered Lar Valley, which during its brief summer season supports the flocks and herds of nomadic tent-dwellers, who pass their winters in the plain villages south of Teheran, and skirting the southern base of the mountain itself, to the village of Rena, above the canyon east of Demavend, where the Heraz River cuts through on its way to the Caspian.

This mountain village, which has an elevation of about 6,000 feet, makes an excellent base, for from this point a well-defined trail winds upward 7,000 feet, to where a few shepherds pasture their



A TURKEY HERDER-SALESMAN AND HIS FLOCK ON THE STREETS OF TEHERAN

The fowls serve in the capacity of garbage collectors while foraging, for they feed on refuse flung from the grimy front doors of the shops. Note the Persian woman in street dress at the right.



Photographs by J. W. Cook

PERSIAN SHEEP IN THE FOOTHILLS OF THE ELBURZ MOUNTAINS

The barrenness of the hills suggests the explanation for the development of the fat-tailed variety of sheep, the tail furnishing food storage for the dry season when pasturage is scant.



Photograph by E. K. De Witt

PERSIAN GYPSIES

Ragged but carefree, they have the same characteristics as gypsies everywhere, and among the Persians, with all their superstitions, the gypsies are especially in demand as fortune-tellers.

flocks on the green, moist areas immediately below the snow-fields.

This part of the ascent, made either on horse or mule back or afoot, requires the better part of a day, during the early hours of which it is necessary to grope one's way through heavy cloud banks. It is a glorious moment, however, when a sudden movement of the clouds clears the sky and reveals the summit, its great golden cap of sulphur glowing in the sunlight, seemingly so near in the dry, clear atmosphere that one is deceived into thinking that the climb is almost over.

The camping facilities at the 13,000-

foot level of the snow-line are adequate in some respects and lacking in others. Water is there in abundance, and campfires ready for the match all too copiously stud the landscape in the form of clumps of dried camel's thorn (see Color Plate V), each much larger than a bushel basket.

MOUNTAIN PEAKS RESEMBLE ISLANDS IN A FAIRY SEA

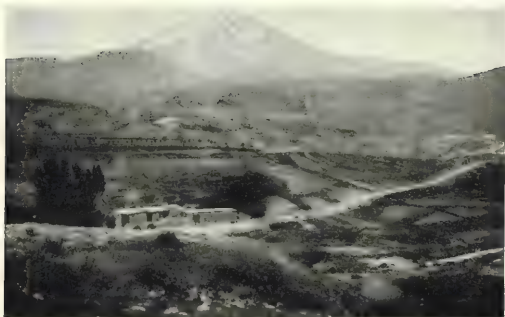
The inadequacy of the sleeping quarters, however, impresses one when, being forced to turn in on an artificially and precariously constructed rock shelf, he



Photograph from Faye Fisher

PERSIAN BOYS ON A HIKING EXPEDITION AMONG THE ELBURZ MOUNTAINS

The Persians are great lovers of nature and the Boy Scout movement has many enthusiastic adherents among the youthful subjects of the Shah, seven of their number having made the difficult ascent of Mount Demavend in the summer of 1914 (see text, page 395).



MOUNT DEMA VEND HAS SERVED AS A GIGANTIC GUIDE-POST FOR MANY GENERATIONS

"Its lonely grandeur has gripped the imagination of intrepid adventurers of all ages. Within its shadow a score of great dynasties have risen and fallen" (see text, page 394).



Photographs by F. L. Bird

ON THE SUMMIT OF MOUNT DEMA VEND, PERSIA'S MOUNT OLYMPUS

The superintendent of the American school at Teheran is seated in the foreground at the left. He and the author, who made the photograph, are two of the three Americans who have accomplished the ascent. Mount Demavend is variously estimated at from 18,000 to more than 22,000 feet in height (see text, page 395).

dare not go to sleep for fear of rolling off upon one of the patent camp-fires.

The ascent from this temporary camp to the crater requires about ten hours of actual climbing; so, however one arranges it, part of the trip up or down must be made at night. Although with nightfall the cold becomes extremely severe, there is the compensation of enjoying the wonderfully luminous moonlight of Persia under very unusual conditions. Soft, mellow, yet throwing almost the radiance of day on every peak and crag and snow-field, it holds one entranced by a scene more glorious than befalls the lot of most mortals to behold; for, far below, the feathery clouds roll and swirl like a soft ethereal ocean, dashing their gentle billows against the lesser mountain peaks that raise their black summits like islands above this fairy sea.

Considering the aridity of the region, it is not surprising that there are no great glaciers to be traversed; but the remains of glacial formations, in particular one immense chasm-like groove, at the head of which is a huge immovable ice-mass, suggest that at one time the country enjoyed a more salubrious climate. The angle of the incline varies only from 40 to 55 degrees, thus rendering the ascent as monotonous and tiring as that of an endless ladder.

NATURE BUILDS LADDERS OF SNOW

The steeper portions of the snow-fields present a most peculiar formation. The snow, or coarsely crystallized ice, instead of offering a smooth surface, is molded into tier upon tier of narrow, tapering cones, averaging two feet or more in height, which evidently are produced by the daily routine of thawing and freezing. A rather uneven melting process starts little trickles of water which seek out miniature channels, and the night's freeze establishes these slight elevations and depressions.

The next day's thaw finds small channels waiting, which are deepened and connected and the elevations accentuated thereby. After this process continues for two or three months, the results are these strange stalagmitic arrangements, which serve admirably as natural ladders for the more difficult sections of the climb.

The sliding, shifting fields of powdered pumice not far below the summit seriously obstruct progress, for the climbing here is similar to what one would encounter in trying to ascend a steep roof covered with two feet of loose snow. Although it requires one and one-half hours for this portion of the ascent, the descent over the same ground is easily made in four minutes and with comparative safety.

ON THE SUMMIT OF THE GREAT LANDMARK

The expanse of the great golden sulphur cap, the edge of which is reached a hundred yards below the rim of the crater, is startling. Thousands of tons of sulphur are exposed to view and the fumes which permeate the air are almost nauseating.

The rocky rim of the bowl-like crater, about 300 yards in circumference, is practically level for a width of five yards, and then slopes gradually inward to the snow which fills the crater itself. The only signs of present volcanic activity are the gaseous fumes issuing from small fissures in the sulphur area.

The lofty isolation of the great peak makes it an admirable observation point. On a clear day the country spreads out in every direction like a giant relief map on which a comprehensive view of the whole complex arrangement of mountain chains and drainage systems replaces the restricted vision of one on the plains. Close at hand the great inter-mountain valleys and far away to the south the green desert fringe and the vast desert itself are visible, while to the north hover the mists and vapors that rise over the Mazandaran jungles and the Caspian Sea.

A feeling of utter insignificance comes over one with the realization that he is at last on the summit of the great landmark which has borne the scrutiny of heroes of many ages of history and is at present the focus for the gaze of the camel-driver of the Persian Desert and the sailor cruising on the Caspian, of the peasant in his rice-fields on the Caspian shores and the village or city-bred dweller on the plateau, of the Turkoman tent-dweller on the transcasian steppes and his Aryan brother, the shepherd nomad of the Iranian tableland.



Photo taken by J. Weston

THE PORTALS OF PERSEPOLIS, THROUGH WHICH THE ARMIES OF DARIUS AND XERXES WENT FORTH TO CONQUER ASIA MINOR

Here is shown the northern entrance to the Hall of a Hundred Columns where Darius held court 2400 years ago. The effigy of the great king mounted on his throne and surrounded by his subjects, is seen in bas-relief on the portal.



Photograph by H. J. H. at F. W. Weston

SHIRAZ, PERSIA'S MECCA FOR BEGGARS, POETS AND PHILOSOPHERS

Business activities have ceased for the hot noon hours at this Khan or alcazar, and an old beggar is keeping watch. Here merchandise is unloaded from the caravans and weighed on primitive scales. The arcades around the court are decorated with colored tiles.



Photograph by Alfred Hruschke

THE BREAD AND COOKED RICE MERCHANT IN A PERSIAN BAZAAR

Commerce takes its tranquil way in the marts of Shiraz where the multiplicity of odors rivals the variety of wares.



Photograph by Harold F. Weston

A GIFT LAMB FROM A PERSIAN POTENTATE

In the absence of her husband, the wife of Ambdullah Khan of Dehbid presented the western traveler with this token of hospitality in lieu of personal entertainment. In the Orient a man never travels except on a pilgrimage or for some special gain. The Persians could not understand a tourist's motives and insisted on assuming that the traveler was on some important mission of a political nature.



PERSIAN PEASANTS WHOSE BURDENS ARE BALES OF CAMEL'S THORN

The black wool caps worn by these men are strikingly similar to the balloon-shaped head-coverings worn in ancient Sassanian days. Camel's thorn is one of the most useful plants to be found in arid regions. It provides excellent forage for camels, is much used for fuel in central and southwest Asia and, being leguminous, it enriches the soil.



Photograph by Harold F. Weston.

THE RESHT GATEWAY OF KAZVIN, THROUGH WHICH ALL CASPIAN-BOUND CARAVANS PASS

There is just enough plain brick in this arch to accentuate the color value and lend dignity to the ornate blue, yellow, black, and white gate.



Photograph by Harold J. Weston

SMOKING THE KALIAN, THE PERSIAN PIPE OF PEACE, AT GABARABAD

Tobacco, dry and powdered, is placed in a charcoal-filled bowl over the water jug. Each smoker puffs deeply once or twice, then passes the carved wooden mouthpiece to his nearest companion as he spits lustily on the earthen floor.



Photograph by Alfred Henricke

HOLY MEN OF PERSIA READING THE KORAN

The dervishes are the religious mendicants of the East who levy tribute on the rich and poor alike. Sitting in the bazars, apparently lost in pious meditation, they startle the passers-by with their unvarying yell, "Ya Hakk! Ya Hakk!" (Oh Truth! Oh God!)... (Oh Truth! Oh God!)... offering at the same time a flower or a lemon, in return for which a present is expected.



Photograph by Alfred Henricke

A DROVE OF DONKEYS RETURNING FROM PASTURE AMONG THE PERSIAN HILLS

As only one meagre crop of grain is reaped each year, these poor beasts do not get much barley; they depend largely upon the grass of the highlands for their forage.

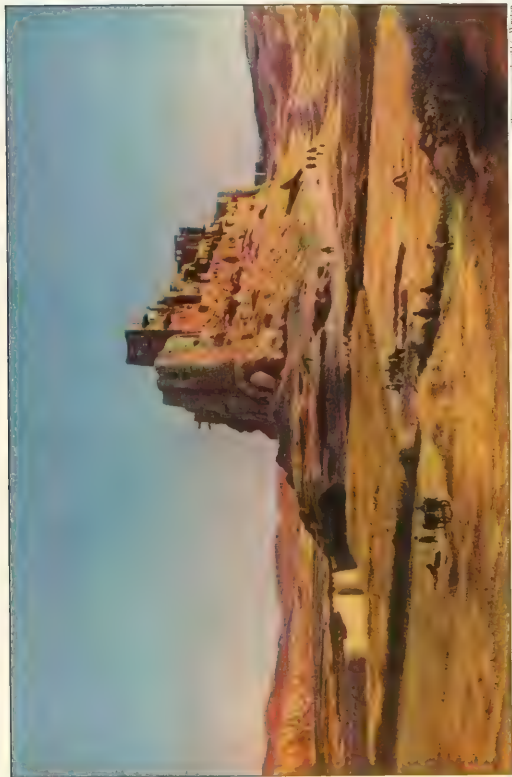


Illustration by J. Weston

“GOD WILLED IT” IS THE ENGLISH EQUIVALENT OF YEZDIKHAFT, THE MOST PICTURESQUE TOWN IN CENTRAL PERSIA

The only access to this peculiarly situated town is from its northern end by a single drawbridge which spans the deep breach between the eminence and the former river bank. It has been compared to a petrified ship left stranded beside a river bed that has been dry for ages.



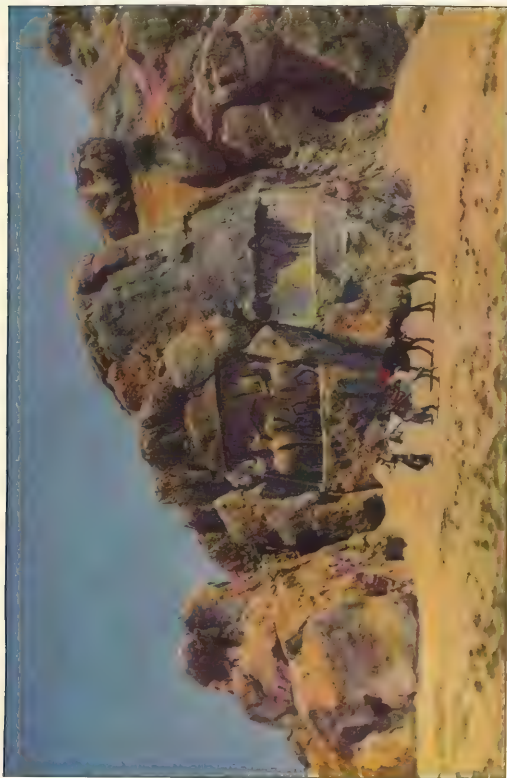
Photograph by Harold F. Weston

THE MESJED KOUCHEEK (LITTLE MOSQUE) AT KAZVIN, PERSIA
 The magnificent tile design of this, the most beautiful mosque in Kazvin, if not in all northern Persia, is sadly in need of repair. The dark object projecting to the right from the dome is a bush that has taken root and grown in a large fissure



THE HEAVY MASONRY BRIDGES OF PERSIA SEEM TO HAVE BEEN DESIGNED TO WITHSTAND THE DILUVIAL

Between the mountain ranges of Kurdistan, the broad valleys, which are from ten to thirty miles wide are watered by streams which frequently disappear in the summer months. Although built hundreds of years ago, this bridge, which is only a foot thick at the top of the arch, sustains the weight of loaded two-ton motor lorries.



Photograph by Harold F. Weston

SASSANIAN SCULPTURES IN THE LIVING ROCK AT NAKSH-I RUSTAM, PERSIA

These carvings date from the third century A. D. and are cut on the face of the rock cliff near the great tombs of the Achaemenian kings. That on the right portrays Varahran II and his courtiers. The larger bas-relief on the left represents King Ardashir, founder of the Sassanian dynasty, mounted on horseback, and receiving from the god Ormazd a ring that symbolizes the gift of sovereignty. The pillar seen in the upper right corner of the photograph is hewn out of solid rock.



Painted by A. G. de la Roche

WINNOWING GRAIN IN SOUTHERN PERSIA

Although a part of the table-land of Persia is well watered, it is often necessary to resort to irrigation. There are many districts which are accounted among the most fertile in the world, but the implements employed in agriculture are primitive in the extreme.



Photograph by Harold J. Wessley

TANG-I ALLAHU AKBAR, THE PASS OF "GOD IS MOST GREAT"

After crossing the desert plateau, Shiraz seems a veritable island of emerald with its rows of dark cypresses and turquoise domes, bordered in the distance by purple hills.



THE INNER COURTYARD OF MEDRESSEH-I SHAH HUSEIN AT ISPAHAN,
PERSIA'S MOST FAMOUS COLLEGE

Medresseh-i Shah Husein, a college for the training of mullahs and dervishes, was built about the beginning of the 18th century by Shah Husein. Within its walls the students live in alcoves around a large court. The scaffolding indicates that the exquisite turquoise tiling of the dome and the minarets is being repaired.

PERSIAN CARAVAN SKETCHES

The Land of the Lion and the Sun as Seen on a Summer Caravan Trip

BY HAROLD F. WESTON*

PERSIANS say, with a great feeling of envy, that the man who has seen the most of the world is the greatest liar. So when I am asked to tell "all about Persia," I generally ask if I should not include Russia, too, having been there just six hours.

What counts most in enjoying, visualizing, or telling about the "romantic East," or any strange place, is your power of imagination. I can but bring together a few faded petals; the reader's imagination must arrange them and appropriately spray them with attar of roses.

Persia, for a surprising majority of people in America, is not much more definite than a hazy pink or green spot swimming around India—"Oh, you know, beyond Turkey."

Persia suggests Omar Khayyam, gardens and rugs, rugs remembered from colorful magazine advertisements or hasty glimpses into Fifth Avenue windows. Many dusty books lie on library shelves. All I propose to do is to offer a few sketches in rough outline, which may help to visualize Persia of today; to pin those green or pink spots onto the map by a few vivid incidents, border them with bleak mountain ranges, dot here and there with crumbling palaces and cypress gardens, color with affable hosts in the form of rotund chieftains or fugitive brigands, enliven with mysterious veiled ladies and equally hidden but more numerous minute "critters"; then sweep it all over with dust, heat, decay, and almost unbroken desert.

Persia is almost as large as Germany, France, Italy, and the British Isles com-

bined. It is an arid plateau from 3,000 to 7,000 feet high, seamed by snow-capped mountains. The people are mostly Aryan, but—but you can read all this in any encyclopedia. So we will start in the good old-fashioned way.

IN THE BEGINNING

Once upon a time there was an armistice, and two young Americans, who since '16 had been with the "Y" in Mesopotamia, conceived the idea of crossing Persia by caravan. The British military authorities gave the casual information that the 2,000 brigands still in possession of the one main caravan route through central Persia might have something to say about it, though the British were sending assistance to the Persian Government to round them up. That was naturally the straw that led the camel to drink, and by May we had left Bagdad with permission to travel on the British military motor convoys through Kurdistan to the Caspian.

A Kurdish lad was obtained as a servant, some emergency rations, a sixty-pound tent, which was never used except to be reviled (by Persian muleteers, of course), and various other incidentals, such as medicines, camera films, and cash.

A Sir Somebody wrote about his trip through Persia, that he had uselessly carried two articles—a revolver and a large box of insect powder. In both cases he sighed, "Of what use is one against so many!" Yea, verily; but he who would venture into the land of "the lion and the sun," let him go well armed with a goodly supply of patience and faith, faith that all is the will of God, no matter what happens: water to drink in which countless pilgrims have performed perfunctory ablutions; mules that are to come tomorrow, you wait, but, "Inshallah" (if God wills it), there will be another to-

* Accuracy in reproducing the vivid tints and tones in Persian costumes, architecture, and skies in the preceding color plates has been obtained through the coöperation of Mr. Weston, who is an artist as well as an author. He not only furnished color charts for all of the illustrations, but eight of the photographs have been colored by him.



Drawn by James M. Darley

A MAP OF PERSIA

Consisting in the main of an arid plateau seamed with snow-capped mountains, Persia is almost as large as France, Italy, Germany, and the British Isles combined.

morrow—for God is indeed Great,
"Allahu Akbar!"

THE GATEWAY TO KURDISTAN

Leaving Bagdad by the little railroad which ran almost to the Persian border, by the second day we arrived at Khani-kin. There is only one passable route from Mesopotamia through Kurdistan into central or northern Persia; hence the importance of the towns on the road used by thousands of caravans and pilgrims.

Let me present a brief sketch of the setting as we were waiting to cross the frontier:

Tents pure white against the autumn-toned uplands; for, although it was May, the coarse grass, thistles, and wild flowers that carpet these desert hills in the spring had already been scorched by the sun. Behind, the dark purple ranges that border the Persian plateau were still spotted with silver streaks of snow.

Black lines were slowly moving—sup-



Photograph from H. D. Baker

THE ARRIVAL OF THE FIRST TRAIN IN TABRIZ, CONNECTING PERSIA BY RAIL WITH
THE OUTSIDE WORLD

The Persian portion of the line runs from Tabriz to Julfa, on the Russian frontier. It was built by a Russian company (see also illustration on page 364).



Photograph from Fritz Morris

WHEN URUMIAH ENTERTAINS PERSIAN ROYALTY

This city, near the northwestern frontier, attained notoriety during the World War as the center of the Syrian or Nestorian massacres. The photograph shows the eager interest of the populace in the arrival of the Shah on a tour of inspection.



THE FRUIT MARKET IN URMIAH

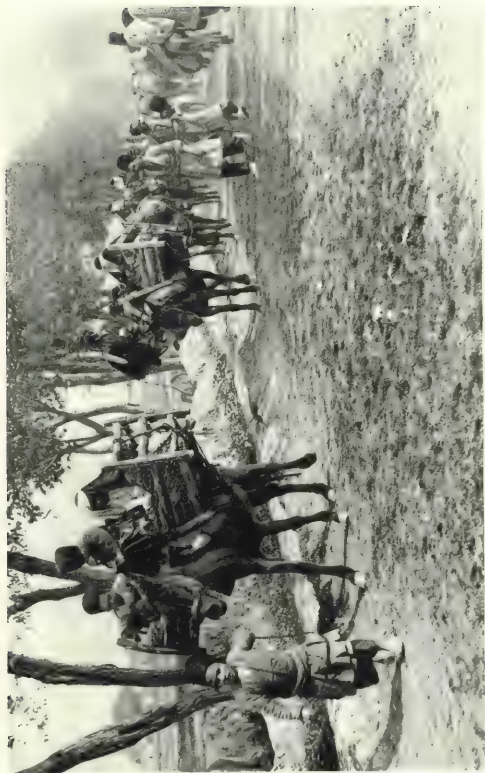
The reputed birthplace of Zoroaster, this city, 12 miles west of Lake Urmiah, is situated in the midst of gardens and orchards. It is noted as a center of missionary activity.



Photograph by Harold F. Weston

VEILED ARMENIAN PEASANT WOMEN OF JULFA, ON THE RUSSIAN FRONTIER

In many Persian towns the Armenian women, whose forefathers have lived for three centuries in a Mohammedan country, have adopted the custom of veiling their faces with kerchiefs to protect themselves from the insulting gaze of Mohammedan men. Silver trinkets and coins—dowry presents—are hung in chains from their ears and around their necks.



Photograph by Lieut. Alfred Henneke

A CARAVAN OF PILGRIMS EN ROUTE FOR MECCA

Note the pen-like hampers in which the travelers are seated (see also illustration on page 303) Pilgrims also make pilgrimages to the holy cities of Kerbela and Nedjef.



Photograph from A. N. Mirzaoff

WASH-DAY ON THE SHORES OF THE CASPIAN SEA



Photograph from A. N. MIZZAOI

COLLECTING SILKWORMS IN THE PROVINCE OF ENZALI, ON THE CASPIAN SEA

Persian silks, like Persian shawls and Persian rugs, are world-famous. The chief centers of production are Khorasan, Kashan, and Yezd.

ply carts and cavalry of the British forces marching up to cross Persia to the Caspian. Squads of khaki-clad figures on the parade ground near the camp, balanced on the other side by the dark-brown forms of camels, which were being loaded with bales of fodder to the accompaniment of an intermittent series of pathetic, enraged, impassioned roars and raucous gurgles from the protesting beasts.

Half a mile below lay the little mud-built town of Khanikin, half Arab, half Persian, brilliant in the sun against a dark fringe of date palms. Along the dusty road between the high-walled gardens there came out of the town a strag-

gling group of donkeys and blue-clad men, returning Persian pilgrims from the sacred cities of Kerbela and Nedjef or caravans of merchandise for the bazaars of Hamadan or Teheran, all with tinkling bells, jangling bells, and clouds of dust.

At last our convoy of Ford cars was ready to leave, and, bumping and chugging, we wound along the white line of the new macadamized road toward the Persian hills.

The journey to Hamadan, some 300 miles, was by stages of twenty miles a day, accomplished in the early morning, before the heat of the day. The cars were driven by unskilled Indian mechan-

ics, which fact added zest to the scenery of successive mountains and rolling valleys. On one day, out of thirteen cars (blessed Fords), one turned turtle, one burned up, one broke its steering gear on a steep pass, and one ran over a Kurd!

The following outline of a combined two days' journey is quite typical of the scenery: First, along the wide Kangavar Valley, past a small village with fine poplars and deliciously scented sweet brier. Over a three-arched brick bridge, which, though built some hundreds of years ago and of little more than a foot's thickness at the top of the arch, was so well constructed that loaded two-ton motor lorries could cross with safety (see Color Plate XII). Then up through the narrow defile of a pass, leaving a magnificent view of a snow range behind us, onto an undulating plain, where brown and white oxen were pulling crude wooden plows. Skirting another insignificant village with a picturesque ruined "château" perched on the top of a steep crag. Down to the side of a swift-flowing stream, with witch-elm, wild almond, and clusters of fruit trees—apricots, peaches, and cherries—where we camped.

With the dawn, out again onto the barren plateau, up and down a second pass to a deserted valley with shimmering salt deposits. Around a promontory of the range we were encircling, and, from the height of a bluff, there lay the village of Huseinabad below us. A characteristic heat or dust haze turned the clouds shell-pink, the clouds that browsed on the towering snow form of Mt. Elwend, which shouldered out the northern sky.

THE KURDISH HORSEMEN

The Kurds are racially quite distinct from the Persians and have rarely been submissive to the central government. They are in reality semi-barbaric, nomadic tribes that live on their flocks and by hunting in these wild mountain valleys. They have their own national costume, which is perhaps the most picturesque in all Persia.

Almost always armed to the teeth, these tribesmen look particularly romantic when dashing down a boulder-strewn hillside on their sure-footed ponies: the gleam of a rifle slung over a shoulder;

flowing purple turban loosely bound around a huge black felt hat; broad, colorful scarf about the waist, half hiding two or even three bandoleers and above which projects hilts of a knife and a locally made revolver or perhaps a German automatic Mauser; baggy trousers, gaily tasseled and embroidered saddle-cloths, and a certain air of bravado withal that vividly recalls an Oriental, a more brilliant Velasquez, or those gallantly attired heroes so naively shown in old Persian miniatures.

A KURDISH WEDDING CELEBRATION

The Kurdish women are generally somber in dress, but do not hide the beauty of their faces under veils as strictly as the Persian women. We were, however, lucky in seeing a gathering all decked out in their Sunday best. The occasion was a wedding.

It was evening. I was seated on a grave-stone, painting the dilapidated town of Kasr-i-Shirin, sprawled out over the brow of the opposite hill, ending in the ruins of a third-century castle. I could look into a courtyard over the enclosing walls and see a noisy wedding crowd.

"Hi, ya, ya, ya, ya," the women cried, emphasizing the first and last syllables, to the accompaniment of a big drum. There was an orchestra, too, consisting of four weird instruments—a guitar-violin, a piccolo-flute, a six-foot brass trombo-horn, and kettledrums—which were being played apparently at random and intermittently. Now and then one or more of the players would stop for refreshments, and then resume hastily and with much added gusto, catching up, I suppose, the part of the unwritten score that he had missed!

The men and women had formed in separate lines, and with locked arms were swaying backward and forward in a sort of folk-dance.

Finally a group of men guests left the wedding, trotting down the hill, still keeping in step and singing in unison that monotonous refrain of the Kurdish wedding march. They were going to a pile of merchandise under some willows by the banks of the river. Soon they would call their camels from where they were



Photograph by Harold E. Weston

WHERE THE RUSSIAN ROAD CUTS THROUGH THE ELBURZ RANGE DOWN TO THE CASPIAN SEA

The southern side of the mountains is absolutely barren, reminding one in color and formation somewhat of the Grand Canyon of Arizona. In contrast, on the northern side of the crest a thick jungle is watered daily by rain-clouds from the Caspian.



Photograph from Elys Fisher

ONE OF THE BEAUTIFUL CITY GATES OF TEHRAN IN WINTER

The snow stays on the mountain peaks all summer, and the quantity of the fall in winter determines the amount of water the city will have during the hot season. A mild winter is frequently followed by famine.



Photographs by Lt.-Col. Alfred Henricke

WHEN THE PERSIAN MOHAMMADIAN SAYS HIS PRAYERS (SEE ALSO FOLLOWING PAGE)

The Koran commands: "Wherefore glorify God when the evening overtaketh you, and when ye rise in the morning, and unto Him be praise in Heaven and earth; and in the evening, and when ye rest at noon." The two "evenings" are interpreted to mean at sunset and after sunset.



Photographs by Lt. Col. Alfred Heinicke

FOUR DISTINCT PRAYER POSTURES ARE TAKEN BY THE MUHAMMEDIAN WORSHIPPER (SEE ALSO PRECEDING PAGE)

Besides his daily prayers, made while facing Mecca, the orthodox Mohammedan is enjoined to perform four other acts of worship—recite his creed, fast in the month of Ramadhan (the ninth month of the lunar year, "wherein the Koran was revealed"), give alms, and make a pilgrimage (*hajj*) to Mecca.



Photograph by Harold F. Weston

FALLEN AND NEGLECTED, THE GUARDIAN LION OF HAMADAN STILL RECEIVES
LIBATIONS FROM CHILDLESS WOMEN

This battered stone image, the only sculptural relic left at Hamadan, was spoken of by Masudi, over a thousand years ago, as "very ancient." Numerous legends and traditions are attached to this lion—pilgrims visit it and childless women pour oil upon its brow to remove the curse of sterility.

grazing on the near-by hills; their caravan was to move on with the setting sun.

AMONG THE RUINS OF THE GOLDEN
PALACES OF DARIUS AND XERXES

Delay in transport at Hamadan caused a never-to-be-forgotten week in one of the American Mission homes and provided ample time for climbing Mt. Elwend (about 12,000 feet) and exploring the historical sites. Queen Esther's supposed tomb is thoroughly uninteresting, and so is the Musallah, the renowned Median Acropolis, unless redecked by your imagination with the departed splendors of antiquity.

The crumbling mound of the Musallah was the site of the palaces of the kings of the Medes and Persians, of the summer capital of Darius, of the golden temple of Xerxes, of the seven-walled citadel overlooking Ekbatana (each wall tiled with a different color, the inner two being silver and gold).

Here the gold and the treasures from sacked Nineveh were brought by the vic-

torious Medes; here Cyrus carried the untold riches of Croesus; here Darius found the decree of Cyrus ordering the rebuilding of the Temple at Jerusalem; here Alexander the Great reveled on his return from the conquest of India.

Once mighty pillars and lofty halls stood here, and now there is nothing left but a mound of rubble, bits of hewn rock, and small pieces of pottery, a few pits where treasure-seekers have dug, and, on the summit of the mound, the machine-gun trenches used alternately early in the World War by the Russians, Turks, and Russians.

From the pomp and splendor of the court of the Achaemenian kings at the height of their glory to the sentinel's implacable tread or the rat-a-tat of the machine-guns of foreign armies fighting on neutral soil—such has been the descent of Persia.

PICTURES OF PERSIANS AND SHY MAIDENS

When I sketch, if near a town, I invariably draw a crowd of loquacious ob-



Photograph by F. E. Murray

A MODERN ROCK CARVING IN ANCIENT RHAGES

Fath Ali Shah, one of the early rulers of the present Persian dynasty, endeavored, perhaps in emulation of the great Achaemenian kings, to perpetuate the memory of his reign by this carving in the rock which forms a portion of the north wall of the ancient Median city of Rhages, whose ruins lie five miles south of modern Teheran, Fath Ali's capital. Just below, and not at all abashed by the overshadowing presence of the great Ghajar on his Peacock Throne, Persian women do their weekly laundry, rug merchants freshen their stock in trade, and tanned bathers enjoy the cool waters of the famous Chashmah-i-Ali (see also text, page 389).

servers. I was trying to catch the last rays of sunlight on the Musallah, with the Elwend Range in the background, when the owner of a lime-kiln in the foreground thought I had done enough and wanted to buy the picture.

The Persians, far more than the Arabs or Kurds, show a great interest in an "achs" (a painting or photograph). Not only small boys, as in Mesopotamia, but older men stop to look and linger and hold lengthy discussions among themselves as to what the poor creature is trying to do. As some one remarked, the bazaars of Persia are full of people very busy doing nothing, and in a country where the password is "Fardah" (tomorrow), everybody has time to watch what others are about.

The village people are often afraid of a camera, for the only thing they are used to having pointed at them is a gun. They also generally fear the "evil eye," which is somehow connected with the one eye of a camera. But Persians are, as a rule,

most vain, and those who have seen a camera before are so anxious to pose that often you have to pretend to take their picture just to satisfy them. Then ensue lengthy explanations why you cannot open the box and give them a copy at once, or else they expect to see the finished product by copying your example and looking in the finder.

Women, on the contrary, are most difficult to photograph. This is partially because, though veiled, they have the idea that a camera has almost X-ray powers—will show their very souls and "sans habits." One day, wishing to snap some peasant women working in a field, I tried to get my camera out speedily. Too late: the bevy of shy females had disappeared under a stack of hay.

A THREE-HUNDRED-MILE DIGRESSION—
TO THE CASPIAN SEA AND RUSSIA

Instead of going direct to Teheran, we decided to keep on northward to the Caspian. There is much silly romance about



Photographed by Harold E. Weston

THE PERSIAN GOVERNMENT'S "LIMITED MAIL EXPRESSES" FROM TEHRAN TO ISPAHAN

This vehicle is a combination sleeper, day coach, and dining-car. Three hundred miles were traversed in it along a rough caravan track, bumping day and night, with opium-reeking drivers and relays of horses—bitching four abreast—every ten or twelve miles (see 481, page 437). It was escorted by road-guards controlled by the notorious brigand, Nashedas Khan (since hanged), whom the Persian Government is said to have subsidized to protect the mails and official personages from robberies.



19th August from Faye Fisher

A TYPICAL PERSIAN CARAVANSERAI, WHERE POST-CARRIAGES AND CARAVANS STOP

In the middle distance note the Persian mail stage drawn by four horses. The average road-house along a Persian caravan route has a large, dingy, smoke-filled room where the traveler can purchase tea, unleavened, pebble-baked bread, buttermilk, cucumbers, and melons (see text, p. 44).



Photograph by Harold E. Weston

THE GREAT MANDAN AT ISPAHAN, BUILT FOR POLO IN THE YEAR 1600, BUT NOW USED FOR THE EXECUTION OF ROBBERS

Two hundred and fifty brigand leaders were recently hanged in this great public square, which was built by Shih Abbas for polo and feets of horsemanship. Particularly notorious criminals were sometimes tied to the mouths of the cannon seen in the foreground and blown to pieces (see illustration on opposite page). The crowd shown in the photograph has gathered around the dead body of Jaffar Khouli (see illustration, page 436). The spires in the distance are not factory chimneys, but minarets of mosques built four centuries ago.



Photograph from Roland Woods.

READY TO BE SHOT FROM THE MOUTH OF A CANNON—A PERSIAN ROBBER AWAITING HIS EXECUTION

The gun is loaded with powder and scraps of metal and the condemned man is roped to it, the muzzle touching his back. The white cloth shows worn in Persia are distinctly shown here: also the tall, hard, felt hats.



Photograph by Harold F. Weston

JAFFAR KHIU'LL EXPOSED ON THE GALLOW'S TO SHOW THE PERSIANS THAT THIS NOTORIOUS BANDIT HAD ACTUALLY BEEN KILLED. Jaffar swore he would never be taken alive. The main band of 2,000 brigands had been broken up or captured. The leaders escaped, but, after ten days pursuit in the mountains, were surrounded. Jaffar, badly wounded in the fighting, died before he could be hanged. Across the Mautan can be seen the turquoise dome of the mosque of Sheikh Jutullah (see page 447).

a name such as the Caspian that allures one. You look at a map and find an irregularly shaped "lost sea" in the unknown wilderness, the beyond, the uncharted main, where your imagination boards pirate junks and sweeps on cyclonic cruises uncurbed. "My," you think, "what a wonderful place that must be!" You get there at last and are amazed to find that it is just flat water, like a sea anywhere. But often it is the getting there that is the real joy, and so it was with the Caspian.

To reach the Caspian we had to cross the Elburz Mountains. In sixty miles the road drops 5,000 feet. Through a twisting gorge that a river has cut, you plunge from barren uplands down to impenetrable forest jungle. On the south side of the Elburz there is hardly a sign of unirrigated vegetation, for all the copious rains from the Caspian fall on the northern side of the crest. One of the blights of Persia is that the rainfall is excessively meager, in the central and southern regions being reported about 5 to 6 inches annually. But in this belt of malaria-infested rice-fields along the Caspian, in contrast, it is considered a dry year if more than half a dozen days pass without rain.

The trip to the Caspian was considered dangerous, as many British had been ambushed in the jungle-lined pass through the Elburz. We got

through safely, but were startled to learn later that the driver of the car following was shot through the head and his companion badly wounded. So that, when returning (after crossing the Caspian on that precipitous invasion and retreat from Russia), we were sent in a convoy with an armed Indian escort.

Turning to the map (page 418), you will see that we have followed the British military road from Bagdad to the Caspian.

We now returned to Kazvin, where I shall let the two color plates (VI and XI) describe for me the tiled gateway by which we reentered the city and one of the mosques, which seemed to me the most beautiful of northern Persia.

A day's run, still by the inevitable Ford, brought us to the capital, Teheran.

PORTENTS OF PERSIA'S REBIRTH

We threaded the intrigues of Teheran and its spacious avenues, lined with chinarr trees and embassies, for a week.

Visits to the Shah's gorgeous palaces, tea with ex-potentates, now plotting against the weak government; discussions with the enlightened Persian official in charge of the suppression of the opium trade; a trip through the institution for training Persians to make permanent rug dyes and replace the cheap German aniline materials; dinner with the editor of the leading radical newspaper, whose revolutionary father was not long ago assassinated; inspection of the big American Mission school—all these I skip, though here one could see new blood coursing through Persia's atrophied veins, and hope became conviction in the eventual rebirth of the nation.

These I pass, as they look to the future, while I am describing the present. So I hasten to the more interesting parts of our trip, from Teheran to Ispahan by mail stage, and from that great city to the Persian Gulf by mule caravan.

What of those roving brigands we were to encounter? It was now a month since we left Bagdad. The authorities at Teheran announced that the robber band was being surrounded; that only if we hurried would we get there in time to participate in the last of the fighting. We were, let it be whispered, approaching the

fray from behind the robbers, and, though some Americans may imagine themselves capable of handling ten enemies each, we were doubtful of the results if two opposed two thousand bloodthirsty fugitive brigands. Alas, history never will know! But more of this anon.

THE PERSIAN GOVERNMENT'S LIMITED MAIL EXPRESS

Anxious to cover the 300 miles to Ispahan as rapidly as possible, we decided to take passage by the Persian Government mail stage, the one regular link, aside from the telegraph line, between the capital and the great cities of central and southern Persia. It is analogous, one might well say, to a Washington-Chicago Limited, provided but two trains ran a week, consisting of one combined sleeper, Pullman, day coach, dining and mail car, the size thereof equaling that of a single hay wagon (see illustration, page 432). The following is a faithful portraiture and strictly not a caricature; in truth, I write feelingly of this memory:

An old, uncovered, springless hay wagon, with big, creaking, five-foot wheels in back and smaller ones in front; four horses, all abreast, that were changed at each road-house, located at intervals of ten or twelve miles; eleven Persians besides us (one more could have been embraced had there been a communal lap) rocking about on top, hanging on for dear life, as we swayed down a ditch or jolted over a rock; baggage and mail bags beneath us—billet-doux even can become callous when pounded upon continuously; alternately half frozen at night or blistering in the sun, as the hours slowly bumped by, for one drove at a trot along the ill-fashioned road across the uneven prairie, in the night carrying no other light than the consciousness of the stars.

Every stone in creation seemed to be strewn in the way during the first night ride; sleep was out of the question. At last it began to get light, and two peaks, largely covered with snow, loomed out of the east, gray sentinels in the cold of the early dawn.

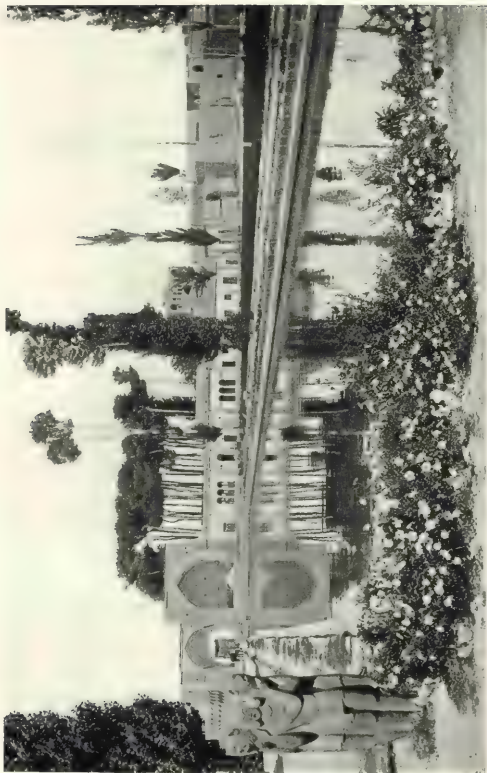
As the sun rose a stop was made to change horses at a lone roadside inn on a desolate slope sweeping back to the



Photo secured by Harold P. Weston

THE CHAHARMahal, OR HALL, OF FORTY COLUMNS, AT ISPAHAN

A garden pavilion and throne room, where Shah Abbas in 1600 held his sumptuous court. The roof is brilliantly decorated with inlaid mirrors and painted wooden designs. The hall, or throne room, contains large mural scenes depicting the Shah and his courtiers. The author's one disappointment was that he saw only 20 pillars. "Oh," said his Persian friend, "you have not counted all. Look also in the pool."



Photograph by HAROLD W. SEON

THE POOL IN FRONT OF THE CHAHAL SITON (SEE ALSO PRECEDING PAGE)

A fitting scene for a gorgeous reception by a medieval Shah in the days of Persia's glory! The carved stone column in the foreground probably dates from the 17th century, but in form and execution it is reminiscent of the great Sassanian carvings.



Photograph by Harold F. Weston

A GATEWAY OF THE RUINED PALACE OF SHAH ABBAS AND THE PAVILION OF THE ALI KAPU AT ISPAHAN

From the porch pavilion overlooking the Maidan, Shah Abbas and his court watched the tournaments in the great square below (see page 434). This building still contains mural paintings, crumbling but beautiful. The women in the foreground are completely veiled, according to the Mohammedan custom.

mountains twenty miles away. A customary "connaught," or channel dug underground, brought water from a distant mountain stream. Our good Mohammedan companions performed their ritualistic ablutions and morning prayers (see illustrations, pages 428 and 429).

By the next relay it was hot, with choking dust blowing from across the desert, and progress was slow, owing to tracts of deep sand. In desperation we drank some filthy tea, slightly flavored by the saline character of the only available water. Such was our initiation into the delights of traveling by *fourgon*, Persian Government hay-wagon mail service.

A PERSIAN WAYSIDE INN

Toward noon we arrived at a village of low, mud-built houses, clustering around a miniature mosque, with a sparkling blue-tiled dome. A thermometer would have registered well over a hundred in the shade; so with silent relief cramped legs crawled down from the top of the wagon the moment its creaking and lurching had ceased.

Inside the road-house (*mensil*) we found one large smoky room. A wide platform seat, covered with coarse, ragged rugs and lounging occupants, skirted the edge of the room. The "guests" were effectively indistinguishable from beggars, and our entry had roused most of these habitués from their noonday siesta—or was it a stupor caused by that drug which is the curse of Persia, for there was a smell of opium in the stagnant air.

The innkeeper, identified by a griminess surpassing that of the others and by the fraternal manner of his welcome, had started blowing up the charcoal in the invariable Russian samovar. The smoke curled unconcernedly up to the flat, blackened roof of poplar logs covered with matted branches and earth; it wantonly dissipated.

A pilgrim—one could tell it from his blue hat, shaped like an auk's egg—was chatting in low guttural tones to a group by the doorway, probably telling the latest gossip (*gufti-gu*, the Persians call it) from the bazaars of Bagdad. Several were smoking a *kalian*, water-pipe (see Color Plate VII). Each inhaled deeply

a draught or two and the overworked mouthpiece, on the end of a coiling tube, was passed on, while the contented inhaler spat lustily on the earthen floor. Others were sipping tea from diminutive glasses with a loud guzzling noise.

A filthy beggar-like chap, who, to judge by the badge on his felt hat, was a Persian gendarme, was drinking from the mouth of a teapot used as the dipper from the kerosene canister in which the daily water supply was kept. I have heard that a Persian's idea of a teapot is that it is a vessel the spout of which is especially adapted to drink from.

Our lunch of tea, unleavened, pebble-baked bread (see page 455), a thick buttermilk replete with traces of its goat-herd origin, raw cucumbers, and a melon, had been placed on the platform beside us. The hot sunlight was streaming through the one doorway and the few green trees outside looked particularly attractive. I said a prayer with each mouthful and sighed, "Well, this is Persia."

SMALL TRAVELERS BECAME CLOSELY ATTACHED

To return to a more absorbing aspect of our perch on the hay-cart, we had been warned that one of the annoying features of riding by mail stage was the Persian attitude toward cleanliness. In a country where it is "considered effeminate to be clean, any man who is obtrusively so is despised," and where "special resentment is harbored against any one who indulges in more than one shave per week," one is not apt to be particular about appearances. But the intimacy of our companionship did not let matters rest there. I remember a British Tommy's pathetic complaint during the "hunting season" down in Bagdad: "It ain't their blinkin' bitin' wot gets me fed up; it's their bally walkin' about!"

Needless to say, when, after three and a half days of this disquieting method of conveyance, we decided to wait for the next post-cart at Kashan and had finally said *Khouda hafiz-i-shuma* (the Persian farewell) to our fellow-travelers, we most involuntarily took a great many of them with us, so closely had they become attached.

One of the magical charms of Persia



Photograph by Hans J. F. Weston

CARAVAN MULES WAITING THE SETTING OF THE SUN WHILE STANDING IN THE BED OF THE ZENDA RUD AT ISPAHAN

Across the river lies the Armenian town of Julia (population 3,000), a suburb of Isfahan, once a sort of Persian Versailles, the royal pleasure grounds of the Safavid kings, given by Shah Abbas in 1603 to Armenian refugees whom he transported there to save from massacre by the Turks. Note the huge camel hales and bells in the right foreground. This photograph was taken from the Pul-i-Ali Verdi Khan, the longest bridge in Persia, of 34 arches and 388 yards in length.



Photograph by Harold F. Weston

SURMEK, A MEDIEVAL STRONGHOLD, SACKED BY THE AFGHANS

This mound is called Kasr-i-Bahram, or the castle of Shah Bahram Ghor, a famous Sassanian king of the fifth century. The crumbling mud-brick ramparts are probably far more recent. It was formerly used by the shahs as a hunting lodge, but has been in ruins since the Afghans overran Persia, in 1789.



A VIEW OF BIRJAND, IN THE PERSIAN PROVINCE OF KHORASAN, FAMOUS FOR ITS CARPETS

The town stands on the great Iranian desert plateau and suffers frequently from sand-storms, some of which are of such violence that occasionally houses exposed to their blast are completely buried. In the photograph a Cossack and a Persian are shown standing on a sand-hill blown up by the wind to such a height that it reaches to the level of the roof of the adjoining house. Birjand is one of the towns in Persia famous for its carpets.

is that it continually reveals glorious unexpected contrasts: the cool green of a garden breaking the barren iridescent plain; the sight of a majestic snow peak when you are plodding through dust and sand at 110° in the shade; brilliantly chiseled bas-reliefs on an abandoned mountain side; the shimmering, opalescent dome of a mosque soaring above a drab city of crumbling mud-built houses.

THE MYSTERY OF A PERSIAN DAWN AND
THE SINGING CARAVAN BELLS

I had not suspected that the lumbering post-wagon would be the means of first revealing to us the subtle wonders of nights of caravan, moving on the desert Persian plateau as on a silent, limitless sea, under the stars—oh, stars of Persia! nowhere else are there such stars!

The dawn disclosed a huge caravan coming up the long, undulating slope of the plateau out of the night. The varietal bells of the camels dinging and donging, first sounded like distant bugle calls or lurking snatches of some forgotten orchestral rhapsody brought to us by the breeze. The high notes blended in a constant ripple of lucid tones, while the plodding "thung, thung" of the low, rich-toned bells of the leaders could be heard, fainter but still distinct, even after the last of the caravan had disappeared over the brow of the hill.

Slowly they went by, some 500 camels in all, with Afghan and Baluchi drivers loping along by their beasts or bobbing sleepily high up on a perilous nest among bales of merchandise. One thought of Vansittart's:

"Ding! dong.
Fugitive throng.
Out of the dark
Into the night,
Silent and lonely,
Gone!—the bells only
Tell us a caravan once was in sight."

Suddenly the sun, a pale gold disk, broke the rim of the horizon and outlined the sharp conical pearl-gray peak of Mount Demavend just to the north of it and fully 120 miles away (see also text, pages 393-400). Then I first fully realized the grandeur, the godliness, of its nineteen thousand feet of height. Half an hour later this vision was lost.

The sun rode high above the nearer barren ranges and the horizon was wrapt in the usual all-enveloping dust and heat haze rising from the desert *lut*, the desolate salt swamps beyond.

KASHAN, FAMOUS FOR HEAT, SCORPIONS,
RUGS, AND OTHER THINGS

At Kashan, the reputed home of the Wise Men of the East who set out for Bethlehem, we waited two days for the next mail stage. The heat, for one accustomed to the 120° in the shade of "Mesopot," was not remarkable; the eight-inch scorpions, I suppose, slept under the many layers of dust; the rugs were in the hands of profiteers, judging by the prices; Mohammedan "Salvationists" made the narrow, arched passageways of the bazaars reverberate with their wails and discoursed to a sleepy rabble—these and a reputation for cowardice are the claims of Kashan for renown.

Let Kashan and the remaining hundred miles by mail stage sleep with the scorpions; for the reader will begin to think those much-harassed brigands were only a smoke screen, anyway, to lure him to disillusion—"the man who has seen the most of the world is—." So we will jump down to the refreshing home of a mission doctor in Ispahan, plunge into a bath, and go out to look for those illusive robbers.

THE FATE OF THE CAPTURED BRIGANDS

While walking out to photograph the turquoise-domed Shah Abbas Mosque, the morning after our arrival, we were startled by the sound of a bugle. A crowd congested the narrow street. Soon a company of white fur-capped Persian police swung into view. In their center marched a tall, gaunt, black-bearded man with hands bound behind his back. It was one of the captured brigands being taken to the great central square to be hanged.

Seven men were hanged the day before, we were told, and nearly two hundred more were to be disposed of that way. They were the leaders of the band that for ten years had terrorized the roads and villages around Ispahan. We had passed villages roofless and deserted that they had plundered. Hundreds of



Photograph by Harold F. Weston

THE TOMB OF CYRUS THE GREAT AT PASARGADE (SEE PAGE 465)

Note the size of the stone blocks and the bush growing between the first and second tiers on the eastern (right) side. The road-guard at the right carried a magnificently carved, silver-sheathed sword.

innocent peasants are said to have been killed. Countless wealth had been taken from caravans. Some 40,000 toman (about \$80,000) in specie, recently seized, had been recovered and the Persian authorities were trying to find out, by the aid of promises and tortures, the hiding place in the mountains where the bulk of the loot had been stored.

NAGAR ALICHE, A FOURTEEN-YEAR-OLD
DESPERADO

Nagar Aliche, the fourteen-year-old son of one of the robber chieftains, was among the handful who knew where this treasure lay hidden. His deeds were more the talk of the bazaar than those of any of the older brigands. Popular rumor accredited him with over two hundred human killings by his own hand or rifle. When the Governor of Ispahan threatened to have him blown from the mouth of a cannon unless he told where the booty could be recovered, he is reported to have replied arrogantly:

"I kill others every way. Watch them die fast, slow. Myself not yet killed. Like best to be blown from cannon. See quick what comes after."

There are other stories of this lad which confirm reports of his fearlessness. When a thousand or so British-trained and officered Persian soldiers had arrived from the south to help the local Bakhtiari, and the main gang of bandits had been rounded up, captured, or exterminated, a tiny band of leaders escaped through treachery to their own men. For ten days they were chased among the mountains.

Finally all but the boy, Aliche, and two followers were killed or captured. Four days later the three were cornered behind a garden wall. The two men were anxious to give in. "What's the use?" they said.

The youngster turned, gave them a scornful glance, shot them dead, killed three more of the attacking Bakhtiari with his last three cartridges, and then gave himself up.

When Aliche, led shackled before the Governor, was asked how many men, women, and children he had killed, he haughtily replied:

"If I had imagined you were such a

fool as to want to know, I would have stopped to count."

WHERE BANDITS SWING SLOWLY IN THE
BREEZE

We drove to the Maidan-i-Shah, where Shah Abbas and his courtiers used to compete in polo and feats of horsemanship. In the center of the square a great crowd was assembled around a lone gallows. There the dead body of Jaffar Khouli, one of the most notorious of the brigand chieftains, was hanging, turning slowly in the breeze. He had died early that morning from wounds received in the fighting—he had boasted he would never be taken alive. But unless he was exposed thus the Persians would probably not believe that he had been caught or killed (see illustration, page 436).

Imagine a street in size and congestion like the central aisle of a department store during a Christmas rush, only—. The blazing electric lamps are shafts of sunlight that pierce the small apertures in the successive brick domes overhead and filter down through the hanging dust, and under foot the earthen street is soft with dust or soggy, with occasional holes which drip down to sewer pits.

You must not be surprised if you feel something hairy brushing your cheek. You start to jab an indignant elbow into a red-bearded worthy (they dye their beards with henna as soon as they begin to get gray) and find it is only the mangy hide of a passing camel, for, I must hasten to add, the bazaar smells can even stifle at their very birthplace the pregnantly masterful aroma of those stealthy-footed beasts.

BAZAAR SNAP-SHOTS, SMELLS, AND ONE-
EYED MAIDENS

Diminutive asses with choking loads of hay flatten you against a wall or drive you into the opening of one of the tiny counter-like stores that line the way; mules with reeking piles of raw hides fresh from the tanneries (Ye gods, how much attar of roses would it take to drown a Persian tannery?) obstinately refuse to give you the right of way; the head of a horse, champing on the cruel Persian bit, unexpectedly projects over your shoulder, as you leap to safety with



Photograph by Harold E. Weston

FLUTED SHAFTS MARK THE ANGLES OF NERXES' AUDIENCE HALL AT PERSEPOLIS, WHERE LINES WERE HELD WITHIN ITS ONCE
TAPESTRIED WALLS (SEE TEXT, PAGE 465)

Of the 72 columns only 11 remain. The terrace which leads up to the hall is covered with an elaborately carved frieze and cuneiform inscriptions. The low ruins in the center are of Darius' palace, some 50 yards to the rear.



Photograph from Roland Woods

THE ROCK CARVINGS OF SHAPUR, THREE MILES SOUTHWEST OF KAZERUN

These bas-reliefs record the victories of three Sassanian kings, one of whom (Shapur I) captured the Roman Emperor Valerian and kept him a prisoner to the day of his death, then stuffed his skin with straw and presented it as a trophy to a Persian temple. The two men seated to the right are tea merchants. Note the samovar in which the tea is made.



Photograph by Lt. Col. Alfred Hensdale

A VIEW OF SHIRAZ FROM ABOVE THE GORAN GATE (SEE ALSO COLOR PLATE XV)

The capital of the Province of Fars is situated in a fertile plain at an elevation of a mile above sealevel. A mud wall four miles in circumference surrounds the town, which has a population of 60,000.

curses for its unconcerned rider: then you are pushed against the oozing side of a goatskin bag which the migrating human soda fountain of Persia carries (see illustration, page 369), the seller of "drinking" water for half a penny a cupful and freshly drawn from the—but I spare you.

Color, movement, shouts, brayings, smells—all through a jazz of dust—such is the heart of a Persian metropolis!

The labyrinth of bazaar streets in any large city covers several square miles. The various trades are concentrated in wards. In the cloth bazaar I remember seeing, beside some of those charming "Persian prints" (cloth decorated with pen-drawn designs of grotesque men and beasts, or pressed by hand-cut wood blocks with quaint flower figures), great piles of cheap Manchester or Birmingham cloth in blatant European patterns.

In the section of confectioners' shops a large variety of odorous fly-covered sweetmeats was spread out on sloping shelves to catch the eye of the crowd, and incidentally dust. In the middle of the side street, over a four-foot copper platter, seven men, stripped to the waist, pulled out a huge mess of thick taffy to a chorus of shouts and laughter.

Around the corner was a Persian "Quick Lunch": mud-plastered seat along the wall of a smoky recess; samovar and many liqueur glasses from which to sip tea; open fire, over which on a metal spit Persian "hot dogs," called *khobobs* (minced meats), were being roasted to the tremulous delight of only Persian nostrils (see illustration, p. 370).

These bazaar details are but snapshots, blurred, distorted. In the murky whirl of the bazaar posed pictures would be out of place. Of verbal snapshots I could fill endless pages, for this is the market-place, school, movie, ball field, and home for most city Persians.

And those one-eyed maidens? In the gold and silver bazaar were gold filigree ear-rings and jeweled brooches which buckle a woman's face cloth at the back of her head, and silver armlets which are amulets, or prayer holders. There were also many engraved miniature silver pots for *khol*, or lampblack, with which Persian women underline their eyes and as-

sist their eyebrows to meet over their nose "like the horns of a gazelle," and rouge, even rouge, without which no well-bred lady of the harem would be content.

Most of the customers here were figures completely shrouded in baggy, formless blue or black gowns, which propelled themselves with unseen feet, guided by unseen eyes. As a Persian poet sang of his fair one, "She has a face like a full moon, but she waddles like a goose!"

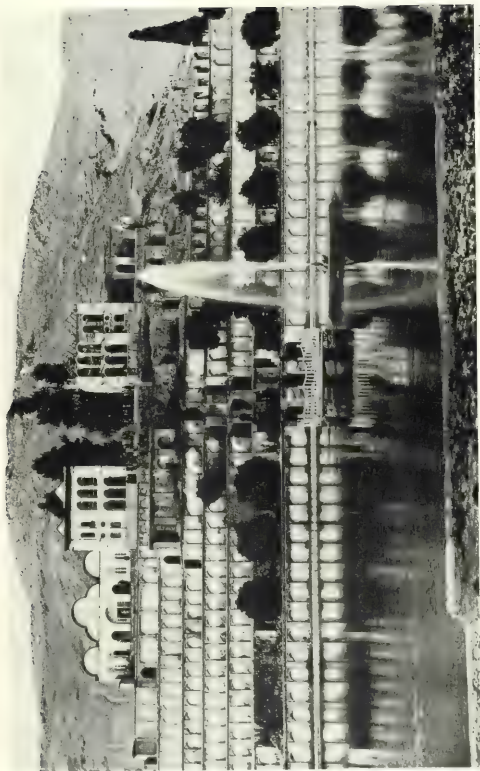
Oh, full moons of Persia who have attained that zenith of praise for a Mohammedan beauty, let the silken clouds continue to veil your pride, lest we find those languorous eyes, the "Cheshum-khoomar" of the Persian poets, rule but the nights of our imaginations! Oh, tender, painted faces, lurking under white lace-worked veils, veils that you lift surreptitiously to get a better look at us as we pass, disclosing one furtive eye, one lonesome eye escaped from the darkness of an unknown harem! Oh, one-eyed maidens of Persia, half moons of mystery, beware, lest too much be revealed and our vision of delight fly from us, lest beauty be stolen with the veil! For such is present-day Persia: a land of hidden treasures for our dreams, but of appalling disillusion when we are confronted with realities, when our expectations are brought into the light.

RETAINING AND REGAINING A THRONE

By the end of a week at Ispahan we had secured a muleteer, four mules, and a donkey with which to negotiate the next 300 roadless miles to Shiraz.

Naturally, the day we were to start and sat waiting on our baggage our muleteer, true to his race rather than his many-times sworn promise, did not turn up. So we philosophically reflected on what Persia would become without the hope of "tomorrow," and had another day to wander through the miles of bazaars, gaze at the vanishing mural paintings on the ruined walls of the great palace of Shah Abbas, and search vainly for the much-sung "Roses of Ispahan."

Riding on a mule Persian style is about as exciting for the novice as a first trip on six-foot stilts. Each mule will carry



Photograph from Richard Woods.

THE "DAGH-I-TAKHT," TWO MILES NORTH OF SHIRAZ, BUILT AT THE BEGINNING OF THE SEVENTEENTH CENTURY AS A ROYAL CARAVANSERAI BY SHAH ABBAS THE GREAT

This building of plastered brick, now used by the South Persian Rifles as British instructors' quarters, is supposed to be one of a series of 100 erected by Shah Abbas. It has suffered considerably in recent years at the hands of raiders. In 1918-19 the wooded park which surrounded it was cleared by the British field force to make an aeroplane landing ground. Below the two main buildings are many baths, store-rooms, and dungheons.

up to 300 pounds; so a great bulk of fodder sacks and baggage is first piled on, with bedding thrown on top to mold these into a less irregular and hence more slippery saddle. These are strapped to the beast's pack with a single cord. You then get enthroned by means of stepping on a bent Persian shoulder, with one cord to the animal's head to rule your destiny.

If the cord holding the load does not slip, if the faithful animal never exceeds a dignified walk or does not stumble, or if in the drowsiness of the long little hours before dawn you do not relax vigilance and irretrievably slip to the ground, all is well, unless, unless—as my docile “Maude” did one day—upon coming to a nice, murky stream, your mount decides it would be refreshing to take a bath.

The main problem, once you are deposited, is to remount unassisted. My companion, Donald B. Watt, in his first day of ignorance, tried it from a rear attack, got half-way seated on the ledge of the mule projecting beyond the baggage, when she, disapproving, went tearing down the hill, with tremendous kicks at each leap, until all my friend had to restrain his unruly subject from absolute freedom was the bitter end of the tail.

So we often preferred to walk part of the twenty-odd miles which was the usual length of a day's journey. Furthermore, it was often penetratingly chilly at night, even though it was too hot for the animals to travel regularly in the daytime.

PROTECTION AND HOSPITALITY FROM LOCAL CHIEFTAINS

We had letters to the principal chieftains along the route and were provided by them with road-guards to protect us from the attacks of stray bands of robbers.

The trip from Ispahan to Shiraz took about three weeks, and every day brought new experiences. Space will allow me to relate only a few typical experiences, while the reader's imagination is given free scope to deck the rest of the way with more vivid incidents yet untold.

It was on the third night of travel, our mules being loaded and ready to leave by sunset. We walked ahead of our caravan, telling our road-guards to follow with the baggage.

We were crossing an uninteresting plain with parallel mountain ranges some five miles away on either side. The route was only distinguishable by dim white streaks, paths trodden by years of caravans. A few hours later the half moon sank. We were alone. Something seemed to have delayed our guards and caravan. We walked slowly on until about 2 a. m., when, all traces of a caravan track giving out, we realized we were lost.

We tried to find our way back and wandered about aimlessly among the strangely quiet hills for a time, until—dull at first, then sharper and sharper—came the pound of horses' feet across the distant plateau. We thought we heard our road-guards out searching for us, and I was just about to fire my revolver to attract their attention, when I realized that shots would probably be the answer. I happened to have a pocket flashlight. I signaled with this. The pound of the hoofs stopped as we stumbled across a dried water-course toward them.

SAVED BY A FLASH

Suddenly there was a shout in Persian to halt. It was a chill moment. By the wavering light of my electric torch we could see the supposed guards standing with rifles lowered at us. We feared they were robber Bakhtiari, for they were the wildest-looking gang of ruffians I have ever seen.

We tried to explain who we were and the chieftains to whom we were going; that we were lost, but that our guards would surely be back any minute looking for us.

Some of them apparently wanted to strip us and leave without further ceremony. Others seemed to have acquired a curious reverence for my flashlight, which I kept turning on and off, to their terror. They thought it would explode and blow them out into the distant gardens of eternity.

The fears of this group fortunately triumphed and we were set in the right direction, as they hastened off into the silence and safety of the night.

Toward dawn we met our road-guards frantically galloping across the plain, with our poor servant breathlessly running after them. There followed much



1904, graph by Lt. A.C.1. Alfred Hemmick

A FRUIT SHOP IN THE SHIRAZ BAZAAR

Shiraz is noted for its wine, made from the famous grapes of the Khullar Valley. Its melons, too, have more than a local reputation.



Photograph by Lt.-Col. Alfred Hume

SELLING THE PANCAKE-LIKE FRESH BREAD IN THE STREETS OF SHIRAZ

In most of the Persian cities bread is prepared in the large ovens of public bakeries, the dough being spread on huge mats of red-hot pebbles. Instead of being baked in loaves, it is made in thin, crisp sheets (see text, page 383).



Photograph by Lt.-Col. Alfred Hemmcke

A BAKER SHOP IN A SHIRAZ STREET

The Persian Government takes drastic steps to punish the baker who overcharges his customers, one method of punishment being to bake the malefactor in his own oven.

gesticulation and attempted explanation, mixing in, as we always did, Arabic, Hindustani, or even English words where Persian failed. We borrowed their horses and rode on toward our destination, Kumishah.

THE BLOOD SACRIFICE: OUR HONOR WAS SAVED

We came to cultivated fields, where, even before the sun was up, here and there one could see puffs rising that floated off and vanished like the smoke from a tug down the harbor on a frosty morning. It was the dust from the grain tossed high in the light breeze by the winnowers (see Color Plate XIV). We drew nearer.

All at once my horse bounded, as one of our guards lowered his gun and took several shots at the peasants.

"What are you doing?" my companion shouted, horrified, forbidding the guard to reload.

"Must kill one those men. Insulted you," said the road-guard in Persian, and he made a determined effort to fire again.

"What do you mean?" my friend asked, seizing the guard's arm.

"Come to them early this day when you lost. Ask where are *frangi-sahibs* (foreigners). They say, 'Don't know. We thresh grain. What for *frangi-sahibs* come bother us in Persia?' Insulted you. We fire them. Dark, no kill. Come back. Kill one now."

He was dissuaded with great difficulty.

The worst part of this is that undoubtedly the charge of insult was false. The road-guards knew that the khan, their overlord, would hear that we got lost. This was entirely our own fault, but he might think we said so to shield our guides. They might be bastinadoed or more severely punished, for the khan has practically life-and-death power over all in his region.

YEZDIKHAST, THE MOST EXTRAORDINARY TOWN IN PERSIA

These guards, therefore, were going to kill an innocent peasant, a serf who was bought with the village, in order to say to the khan that we had been avenged,



Photograph by Harold F. Weston

BEING RECEIVED AT THE PORTAL OF A PERSIAN VILLAGE MANSION

The serfs or poor peasants of Persia generally live in hovels of stone and mud, in villages inclosed by high walls. Windows are crude holes. Doors are blankets hung across the openings. The smoke wanders out gradually. These people are extraordinarily ignorant and primitive, but are good-natured and hospitable.

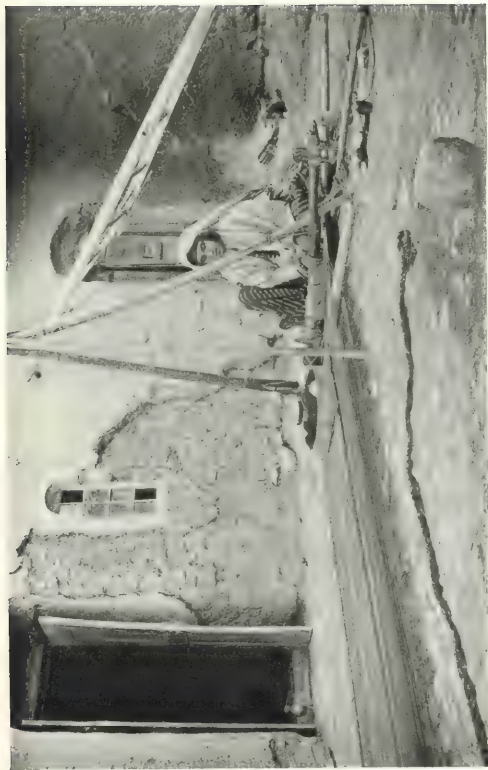
our annoyance had been atoned for, our honor saved.

Three days later, after an exceptionally weary night of caravan, our eyes, accustomed to the unbroken sequence of rolling plateau, were abruptly presented with a view of Yazdikhast. It is only by realizing this contrast that the picture of Yazdikhast can give one something of the thrill that we felt on coming upon it across the waterless, treeless, almost trackless, uplands of Persia (see Color Plate X).

Yazdikhast, which means in old Persian "God wills it," is the most strikingly situated town in all Persia. It has been

compared to a petrified ship left stranded on one side of a deep river valley.

Approaching it from the plain, one sees only the tops of a few houses and the cracked dome of a single mosque; but on reaching the edge of the ravine, a quarter of a mile broad and fully 200 feet deep, formerly a river-bed and now covered with rich grain fields, one is unexpectedly confronted with the most remarkable picture of a city of the dead—a sheer rock cliff topped by half-ruined mud-and-stone-built houses piled four stories high on its narrow crest, projecting beams of broken wooden balconies that thrust their arms against the sky like decaying gib-



Photograph by Harold F. Weston

A KASHKAI WOMAN AT DEIRUD MAKING A RUG

This type of rug loom is portable and is generally used by the nomadic tribes. On it small rugs only can be made. The woollen yarn is dyed locally, but in recent years German aniline dyes, brilliant in color and liable to run or fade, were dumped upon Persia and were widely used. The Persian Government has made strenuous efforts to stop the sale of these dyes.



Photograph by Harold E. Weston

A KASHAN RUG, PRODUCT OF TODAY

A young Persian nobleman out for a constitutional in his garden of cypresses and roses! In modernity of conception and humor of execution this product of the rug loom is far removed from the Persian masterpieces of old. Many prominent grandees, from the Shah downward, have their portraits done this way (the design is more apparit if the illustration is held in a vertical position). When the author was in Kashan he was asked for a photograph of the President of the United States to immortalize thus on a Persian rug.



Photograph by Harold F. Weston

AN OLD WOMAN OF YEZDIKHAST SPINNING YARN (SEE COLOR PLATE X)

She holds the primitive spindle steady with her bare feet, turns the wheel with her right hand, and guides the yarn with her left.



Photograph from Faye Fisher

A PERSIAN MOTHER AND HER CHILDREN

In the hammock-bed is a boy. The little girl wears the familiar head covering like her mother. As in Japan, the shoes are removed upon entering the room and chairs are seldom used. When a foreign visitor arrives, several high cushions are piled together, so the stranger will not have to sit on the floor.



Photograph by Lt.-Col. Alfred Heinicke

A TEA PARTY IN PERSIA

Everybody carries something—one the charcoal, one a teapot, one the sugar, another the samovar. Having selected the spot for the social hour, the women squat down and prepare the tea and water-pipe.

bets, a single drawbridge that spans the deep breach between the town and the former river bank and affords the only possible means of entrance.

All forlorn, it stands baking in the hot sun. One expected to see vultures soaring above it and could not refrain from thinking of the time when a tyrannical shah years ago flung the best of its young men to death in the valley below.

AN AFFABLE HOST AND A TYPICAL FEAST

The Khan of Yezdikhast had come out to meet us, and hospitably escorted us to the cool courtyard of his house, in the valley at the further end of the town.

That evening we sat with him and a few notables of the village on rugs spread out on the flagstones of the porticoed platform overlooking a little enclosed garden.

A sumptuous feast had been prepared. There was, of course, pilau, the *pièce de résistance* of any Persian dinner. It consisted of rice cooked in grease and meat cooked in pomegranate juice with nuts

and fruits of various kinds. We had also great slabs of Persian bread, other dishes of rice, buttermilk and "sherbet" (sweetened tepid water), which we sipped from a communal wooden spoon.

We ate with the fingers of our right hands, as is the Persian custom, and all would have been well but for the etiquette which required our host to pluck off those fatty portions which he deemed choice morsels, roll them in a huge ball, and deftly force them between our unwilling lips.

The pleasure of dining with this khan was greatly diminished for me by discovering, shortly after our repast was over, the usage of a little domed building placed over a small stream, the only apparent source of water supply. "For washing the bodies of the dead," I was told. This would not have worried a Persian, however, who firmly believes that "all running water is pure."

One of our road-guards shot a gray quail with feathers as varicolored as those on the necks of the male doves in Bag-



Photograph by Lt.-Col. Alfred Heinicke

A NOMAD WOMAN PHYSICIAN BLEEDING A PATIENT BY
"CUPPING"

When leeches are not to be had for blood-letting purposes the cup method is employed. Messengers have been sent as far as 180 miles on foot to get the blood-sucking worm for a wealthy patient (see text, page 465).

dad. We often stirred up small herds of gazelle, which our guards generally went wildly chasing after and once killed one; but this was the only feathered creature that was shot. When the road-guard presented it to me, he started a long discussion about America. My monosyllabic answers seemed intelligible.

A LOQUACIOUS ROAD-GUARD

Persians, by the way, often call America *Yangi Dunya* (New World), which has a curious phonetic resemblance to Yankee Doodle. The most interesting

fact I gathered from him was that he had seven sons and (many) daughters—he did not bother to count—and two wives, one at Abadeh and one at Surmek. I found most Mohammedan worthies agreed that though allowed four legal wives, one is generally enough, and if two are owned they are placed in separate localities, as the saying runs, "Better two tigresses in a single den than two brawling wenches."

We paused, a week later, during the heat of one day at a small encampment of Arab nomads. These tribes live in black tents made from camel's hair. With these they move from the borders of Mesopotamia, where they pass the winter, up onto the high plateau of central Persia. Here they graze their flocks and reap one meager crop of grain (see illustration, page 391).

They are as primitive as the old Semitic wandering tribes before the days of Babylon. They are, however, peaceable and hospitable.

AN ARABIAN-NIGHTS HOST

We were taken into the tent of the petty chieftain who ruled this obscure tribe.

Every one has retained from youth a few vivid pictures from hearing the stories of the Arabian Nights. Our host, except for his clothes, which were far too drab, looked indeed as if he had just escaped from one of those jars in which Ali Baba's thieves were hidden.

Of enormous proportions, about six



YOUNG PERSIA

Photograph by Lt.-Col. Alfred Heinicke

feet three, with huge arms, he had great drooping mustache and a large nose with similar proclivities, eyes that bulged so that nearly half an inch of white showed around the small brown irises, shaggy black hair spreading out some six inches over either ear, head shaven on top, giving the effect of semi-baldness, and a tiny flat-topped black cap perched on the back of his head, which artistically gave scale to his romantic features.

He had come back from killing and skinning a little brown lamb that had been given to us by the Khan of Dehbid (see Color Plate IV). Standing there in the sun, peering into the tent with a broad grin, a blood-dripping, curved knife in one hand, in the other the lamb-skin glistening red as his hands—who would not swear that this was the vision of a nightmare from boyhood dreams of the Arabian Nights?

We had been told that the native Persian villagers have the belief that every European who appears is a *hakim sahib* (doctor), so great is the reputation of the few mission doctors; consequently we carried quite a stock of simple remedies in order to humor them. After our arrival at Gabarabad, a walled village of unusual filth (Color Plate VII), a great crowd of women carrying anemic babies, of cancerous-looking individuals with festering sores, and of many of all ages partially blinded by that terrible eye disease of the East, gathered about us. They said nearly a third of the village folk had died recently after three days of being *kheili garm* (very warm). It seemed to be malignant malaria, so we gave out as liberal portions of quinine as possible.

It is pathetic what suffering people have to endure who have no ideas of



Photograph by Harold F. Weston

THE PERSIAN MAIL STAGE (SEE ALSO PAGE 43) ENTERING THE CITY OF SAVER, AN ANCIENT CAPITAL OF PERSIA, SOUTHWEST OF THE MODERN CAPITAL OF TEHRAN

To the right of the gateway can be seen a picturesque wind tower or shaft built on the roof called "bad-girs" (wind collectors), constructed to carry the prevailing summer breeze down to the water-sprinkled rooms in the basement of the buildings, where the Persians recline during the heat of the day.

cleanliness and are hundreds of miles from the nearest doctor. For eight days a peasant from Yezdikhast attached himself to our caravan. I wondered at first whether he was starting out on some pilgrimage, but I learned later that he was walking some 180 miles and back to get some leeches for a rich and prominent citizen of his town who was desperately ill, but who most probably did not need leeches at all. But I digress from the incident at Gabarabad.

An old man came pleading to us, calling loudly on Allah the Merciful for a miracle. He was almost blind with cataracts on both eyes. I tried to explain that there was nothing we could do for him, but he followed us and sat outside our hut, howling pitifully, calling strenuously for the mercy of Allah. Our caravan had to move on that night. We needed sleep. So, finally, thoroughly annoyed, as we could not persuade him to leave and wishing to give the old man at least one peaceful night, I poured out a large dose from a bottle and gave it to him.

"You will see in the morning," I said. The label on the bottle was "castor oil."

"THE PATHS OF GLORY LEAD BUT TO THE GRAVE"

Three famous historical sites lie on this caravan route: Pasargadæ, where the only building left intact is the tomb of Cyrus (page 446); Naksh-i Rostam, where the tremendous tombs of the Achaemenian kings and Sassanian carvings are cut in the face of a great cliff (see Color Plate XIII), and Persepolis. All of these are so well known, have been so adequately described by every archaeologist and famous writer who has visited Persia since the days of Marco Polo, that I hesitate to attempt even a brief sketch of how the most important of all Persian ruins, Persepolis, looks today (see illustration, page 448).

As the traveler crosses the plain of Mervdasht, the slender columns of Persepolis grow steadily taller and more distinct. The ruins lie on a great platform built out from the promontory of a mountain range. The stately palaces of Darius, Xerxes, and Artaxerxes, once wonders of the world, can still be clearly

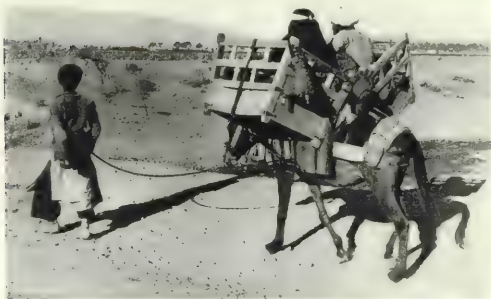
distinguished, and many of the great stone architraves and portals, sumptuously covered with bas-relief, are standing today, lonely but vividly impressive ruins, as left after they were destroyed in that tremendous bonfire set by the torch of Alexander the Great in drunken celebration of victory (Color Plate I).

Far more interesting to me than the ruins of Babylon or Assur, Persepolis is preëminently satisfactory in giving still a graphic idea of the vast scale of the buildings, in possessing astonishing bits of bas-relief as clear as the day they were hewn from the stone, and, above all, in leaving enough intact so that the imagination can without difficulty span the great gaps from high-flung column top to column top, raise the fallen fluted pillars, and resurrect the former glory of those world-famed palace halls.

Would that the glory and ambition that once was Persia's had not so completely disappeared! In the character of the Persian peoples today, except for a handful of enlightened radicals, there is little trace of their ancient heritage. To sense the grandeur of the days of the Achaemenian kings, of the leadership and power of the Persian Empire that was, is not, and may never again be, one must turn to the silent and neglected ruins of Persepolis.

After threading caravan roads under barren mountains, across the desert plateau, sweltering days in filthy caravanserais, nights under the stars when the monotony was broken only by the mystical sound of caravan bells passing in the darkness, the first sight of the emerald island of Shiraz against the blue-violet hills is so impressive that one unconsciously exclaims, *Alahu Akbar* (God is Most Great). Thus we first saw Shiraz, with its rows of dark cypress and the turquoise domes of mosques, coming through the Koran Gate into the city from the north (see Color Plate XV), and our eyes continued to behold far greater beauty in this squalid town than it deserved, for it came to mean a week's rest in the British consulate garden (see pages 450, 454, and 455).

I must leave to the imagination our visit to the tomb of Hafiz, the best-loved poet in Persia, and a week full of enter-



HUSBAND AND WIFE ON THEIR WAY FROM PERSIA TO MECCA



Photographs by Lt. Col. Alfred Herack

THE WAY A RICH PERSIAN TRAVELS: HE IS IN FRONT, CANE IN HAND, SPEAKING TO HIS SERVANTS, HANGERS-ON, AND GUN-BEARERS

tainment by the uncle of the present Shah of Persia, by a British general, and other officials, for (shall I confess?) we were thought to be secret agents for the American Government traveling through Persia in those unsettled times, and the more we said to the contrary the more it was believed. I cannot leave Shiraz and Persia, however, without describing at least one of the famous gardens.

"THE ENVY OF HEAVEN"

Before breakfast we cantered out to the garden of the British Resident. He had asked us to come out for a swim in the adjacent garden of a Persian grandee of the neighborhood.

It was the most attractive garden I had seen in Persia. The main avenue was well over a hundred yards long, with superb cypresses on both sides, most of them thirty or forty feet high. There were also double side alleys with chinar, pine, and fruit-trees.

At the lower end of the central grass-covered lane was a pillared garden-house, open, as the Persian name for it (*Chahar Fasl*) implies, to the four winds, the four seasons. At the other end there was a series of terraces with silent fountains, stagnant pools of water, and forgotten beds of flowers.

This terrace led up to a huge tank, recently repaired and sparkling with clear blue-green water, which acted as a doorstep and mirror to a house of a particularly attractive style of Persian architecture.

We were about to undress when our friend the Resident advised us to take to the bushes and don improvised bathing suits, for the ladies of the harem were wont to watch the proceedings from the darkened recesses of the latticed windows! With visions of rows of unseen flashing black eyes, we plunged into the protecting shade of towering pine and cypress.

The name of this garden is, I think, *Resht-i-Behesht* (Envy of Heaven). Persian gardens, so praised by Persian poets and glowingly described by travelers, can hardly be expected to live up to their names. "The Garden of the Thousand Nightingales" is typical of Persian exaggeration.

One garden is called "The Garden of the Forty Colts" because, so the legend runs, it was formerly so vast that a mare which had been lost was not found until she had reared a brood of forty colts.

Again the charm lies in that deceiving power of Persia—contrast. After the desert and dust of weeks of slow caravan, the coolness and refreshing greenness of these little walled gardens, intensified by the *dolce far niente* of days of rest, makes one almost believe these are veritable "Gardens of Eight Paradises."

To reach the Persian Gulf we had still a week of caravanning. The British, by aeroplane attacks on their strongholds, had disposed of most of the robber bands in this neighborhood and had erected small garrison forts along the more unsettled lower section of the route. It was formerly dangerous crossing the precipitous passes by which one leaps down 6,000 feet over jagged, serrated ranges to the sea.

The hoofs of beasts of burden from ages past have worn steps in the steep face of the rock; it is impossible to pass a fellow-traveler except at special places, and a slip means oblivion. The British have, however, started building a road and have blasted a remarkable path winding up the sheer cliffs.

Our one misadventure was that half way to the gulf I had to stop at a tiny British fort for a week of malarial fever.

The last three days of caravan I did laboriously, with a "sick convoy" of Indian soldiers bound for the gulf port of Bushire to await transport by hospital ship to India.

THE LAST NIGHT ON THE CARAVAN ROAD

My last night on the Persian Caravan Road will never be forgotten. It was at the caravanserai, then used as a British garrison fort, at the top of the pass at Kamarij. My cot had been placed on the roof. It was a hot night. I had fever and did not sleep.

From the courtyard below came the sound of the *tablas* and *dholkis* (drums) of the Indians. They sang, about thirty of them, an endlessly repeated chorus to an endless verse, taken up by various leaders at various pitches. When they



Photograph by Lt.-Col. Alfred Heintze

A STALL IN THE COPPERSMITH'S BAZAAR OF A PERSIAN CITY

had finally ceased and the moon had set, a dog, five dogs, ten dogs barked furiously in a near-by camp of nomads.

A night caravan passed, with much tinkling of bells and the usual gruff calls of the muleteers. Later, the stillness of the night was abruptly broken. The sentry at the corner tower had challenged and incidentally scared the life out of a Persian who passed too close with, judging by the sounds, three or four donkeys.

A breathless pause, a volley of unintelligible shouts from the Indian, and this lone quivering Persian stole off into the night. But then, his fear overcome, to show his truly Persian bravery, he burst

forth into the characteristic long moaning warble of a Persian melody.

There was something very sad and yet fascinating about that wailing refrain sung to the grayness of a desert gravel plain at night, with ghostlike mountain ranges, sharp irregular peaks, still catching the faint light of the moon, and with the stars—myriads of stars—overhead.

Contrast again and mystery. Silence and then barren night mothering at her bosom those weird notes of that intriguing Persian rhythm. It will always remain typical of the Persian Road for me, one of its greatest charms, that lonely Caravan Song fading into the night.

A Map of Asia in six colors (size 28 x 36 inches) will be issued as a supplement with the
MAY GEOGRAPHIC

Notice of change of address of your GEOGRAPHIC MAGAZINE should be received in the office of the National Geographic Society by the first of the month to affect the following month's issue. For instance, if you desire the address changed for your June number, the Society should be notified of your new address not later than May first.

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Good fare for my friends and myself.
I never can measure the health and the pleasure
Stored up on this wonderful shelf.



A "private stock" worth while

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An invigorating dish to start the meal off with a glow, waken your appetite and make all the food taste better and do more good.

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Two hundred years! Yet kindly, tireless Father Time still has the call; still stands forth, as Shakespeare hailed him, "The king of men!"

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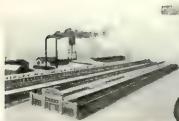
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Where the facts came from

A new building of the great lathe works of Lodge & Shipley, Cincinnati. It is actually heated for "nothing a year" by a forced hot-water system. Chace-Wright Co., consulting engineers. The problems and solution were no less dramatic than those of the incident related below.



PLANT ENGINEER

PRESIDENT

CONSULTING ENGINEER

PRODUCTION MANAGER

"Proposing to heat a building for nothing a year *takes courage*"

They wound up the conference in the boiler room. The man called in by the Consulting Engineer had left them to begin his study of the plant.

They had put up to him this problem: How could he heat the new plant, 48,000 square feet floor area, with three old boilers already taxed to the last horse power?

"It can't be done," said the Plant Engineer.

"It's got to be done," replied the President. "In these times we can't wait for new boilers nor get a new power house built."

(One week later)

The Production Manager: "But the new plant is twice the size of the one those boilers are now heating. Does this 'wonder worker' claim that both plants can be kept warm without any new boilers?"

"Precisely that! This new system will heat the old plant with only one boiler."

"With a third of the coal!" exclaimed the President.

"Why that means heating the new plant for nothing!"

"Impossible!" came back the Production Manager.

"No, I don't think so," said the Consulting

Engineer. "Exact engineering often accomplishes seemingly impossible economies. A heating

specialist should figure all heat losses accurately and calculate all frictional resistance so that he knows precisely what his radiating surfaces will do in zero weather."

"But that's only theory," said the President, "I haven't the courage to back such an idea with my pocketbook."

Consulting Engineer: "You don't have to. That man is a Grinnell Company engineer. His company backs his convictions with its own pocketbook. They will guarantee temperatures in both the old and new buildings from those boilers. Not only for the first year but so long as conditions remain the same in the two buildings."

President:

"Call the Grinnell man in. I'd like to meet him and tell him to go to it! I also want to compliment his company on having the courage of its convictions!"

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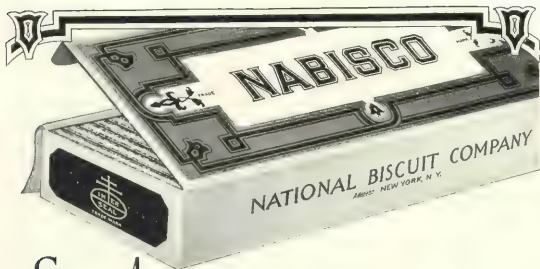
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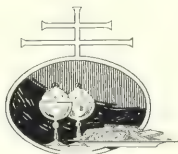
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See how teeth glisten then

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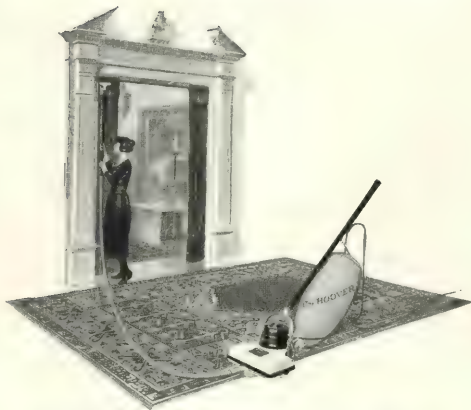
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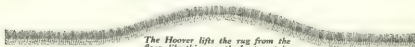
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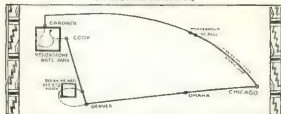
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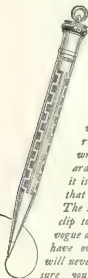
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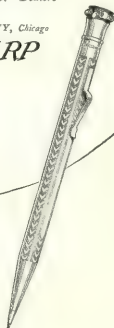


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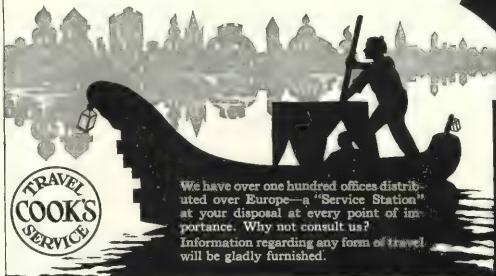


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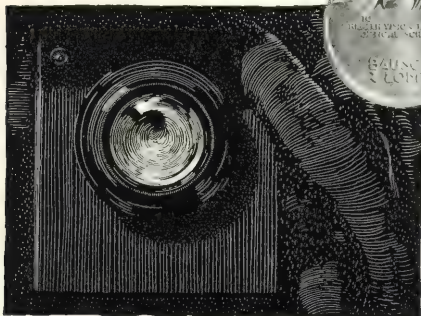
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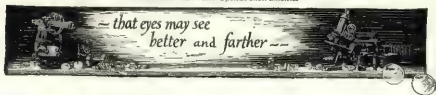
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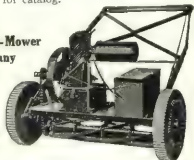
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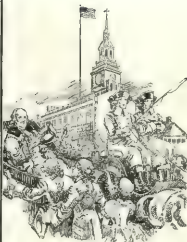
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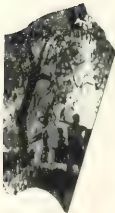
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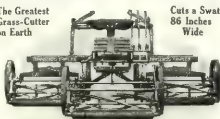
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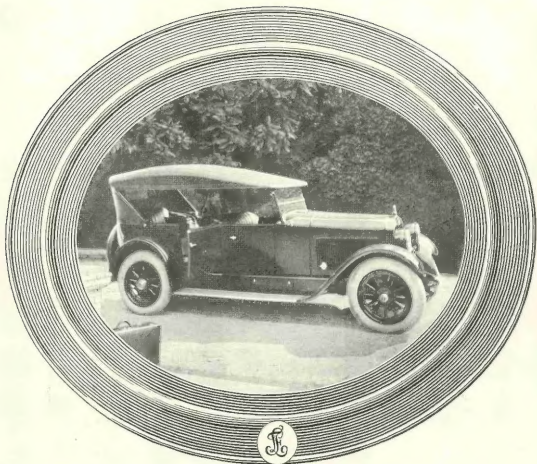
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Avoid the risk of such embarrassing moments. Go to any good Stationer, Jeweler or Druggist and

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That's the pen for you and everyone else who needs a pen that can be depended upon in every emergency, and under all conditions.

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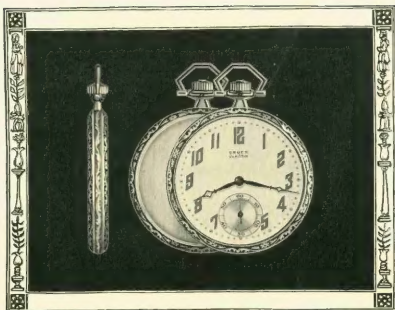
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No. 5C Manifold Pen illustrated, \$5.75

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NM- "The In-
taglio" Gruen
Verithin. Black
inlaid enamel.
14kt. solid green
gold \$160.00
With 14kt. solid
white gold back
\$285.00.

Solving a watchmaking problem four centuries old

Combining rare beauty with dependable accuracy, the Gruen Verithin illustrated above is one of the finest examples of the modern watchmaker's art.

For four centuries one of the most important problems of the watchmaker has been that of reducing the size of the watch without the loss of strength and accuracy. It was not until the Gruen Watchmakers Guild conceived the Verithin wheel train idea that the complete solution of this problem was reached.

With a simple rearrangement of wheels that saved half the movement space, without reducing the size or strength of parts (see wheel train illustration), the Gruen craftsmen set a new standard for precision accuracy in a pocket watch of beautiful form. Thus, in the Gruen Verithin—America's first accurate thin watch—has been solved a watchmaking problem four centuries old.



*How the Gruen Pat. Wheel
Construction made an accu-
rate watch logically thin.
It isn't a Verithin unless it
is a Gruen.*

In picturesque Madre-Biel, Switzerland, master craftsmen, with the aid of American machinery, fashion the Gruen movements to the exacting standards of the guild. On Time Hill, Cincinnati, is the American workshop. Here the beautiful hand-wrought cases are made, the movements fitted into them, and then given their final adjustments and tests for accuracy.

At the sign of the Gruen Guild

Gruen Watches are sold only by chartered agencies, among the best jewelry stores in each locality. Look for the Gruen Service Emblem. There you will find the Gruen Verithin and other Gruen masterpieces for men and women.

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